

THE  
SCHOOL REVIEW

A JOURNAL OF SECONDARY EDUCATION

*Edited by*  
THE FACULTY OF THE SCHOOL OF EDUCATION OF THE  
UNIVERSITY OF CHICAGO

---

VOLUME XXXI

---

JANUARY—DECEMBER, 1923



THE UNIVERSITY OF CHICAGO  
CHICAGO, ILLINOIS

School of Education

Oct. 1, 1928

Published

January, February, March, April, May, June, September,  
October, November, December, 1923

2800

4  
11  
E93  
V. 31  
1923

EJ  
2705  
S 61  
131

## INDEX TO VOLUME XXXI

### AUTHORS

- Alltucker, Margaret M.—What Can the Secondary School Do for the Student of Low I.Q.? 653-61
- Archer, C. P.—School Government as an Educative Agency, 430-38
- Asker, William.—The Proposed Reorganization of the Secondary-School System of Sweden, 689-703
- Bennett, H. S., and Jones, B. R.—Leadership in Relation to Intelligence, 125-28
- Bowman, Leona F.—A Study in Organization of Food and Clothing Courses in High-School Home Economics, 54-66
- Brainard, P. P.—July Resolutions of High-School Teachers, 685-88
- Breslich, E. R.—Supervised Study in Mathematics, 733-47
- Briggs, Thomas H.—Curriculum Reconstruction in the High School, 109-15
- Briggs, Thomas H., and Miller, George R., Jr.—The Effect of Latin Translations on English, 756-62
- Brown, E. H.—The Life of Christ in the Upper Sandusky High School, 704-6
- Charters, W. W.—The Los Angeles High-School Curriculum, 95-103
- Cowing, Helen H.—A Teacher's Time, 351-62
- Davis, C. O.—The Size of Classes and the Teaching Load in the High Schools Accredited by the North Central Association, 412-29
- Davis, Jesse B.—The Influence of College-Entrance Requirements on the Public High Schools of New England, 445-51
- Deam, Thomas M.—Diagnostic Algebra Tests and Remedial Measures, 376-79
- Eaton, T. H.—Teaching for the Sake of Vocational Choice in Rural Communities, 191-203
- Ensign, Forest C.—Evolution of the High-School Principals, 179-90
- Evans, Evan E.—What to Do with the High-School Assembly, 282-86
- Ferguson, Arthur W.—Articulating the Junior and Senior High Schools, 540-46
- Ferriss, Emery N.—Curriculum-building in the Rural High School, 253-66
- Fillers, H. D.—The Managerial Duties of the Principal, 48-53
- Foerste, A. F.—A Statistical Study of the College Records of Graduates of the Steele High School, 452-59
- Fort, L. M.—College-Admission Requirements in the North Central Association, 680-84
- Frank, J. O.—The Preparation of High-School Teachers in Wisconsin Normal Schools, 16-27
- Freeman, Frank N.—Requirements of Education with Reference to Motion Pictures, 340-50
- Glass, James M.—The Reorganization of the Seventh, Eighth, and Ninth Grades—Program of Studies, 518-32
- Glicksman, H.—Training for Power, 301-6
- Greist, O. H.—The Administration of Consolidated Rural High Schools, 129-35
- Hinton, Eugene M.—Opportunities for Professional Careers as High-School Principals, 28-35
- Hobson, Cloy S.—An Experiment in Organization and Administration of High-School Extra-curricular Activities, 116-24
- Horn, P. W.—The Bad College Risk, 670-79
- Horrall, A. H.—Public Speaking in the High School, 287-93
- Howe, C. M.—The High-School Teacher and Athletics, 781-86
- John, Rolland R.—The Principal's Load, 748-55
- Jolley, L. F.—An Accounting System for High-School Organizations, 136-42
- Jones, B. R., and Bennett, H. S.—Leadership in Relation to Intelligence, 125-28
- Judd, Charles H.—Education and the Movies, 173-78
- Kurz, Harry.—French as a Business Proposition for American Students, 662-69

- Lewis, Grace T.—Centralizing Student Activities in the High School, 612-26
- Lewis, Grace T.—Increasing Educational Opportunities for High-School Graduates, 267-75
- McCoy, Martha Jane.—An Experiment in the Use of an Anthology, 219-23
- Miller, George R., Jr., and Briggs, Thomas H.—The Effect of Latin Translations on English, 756-62
- Mitchell, S. C.—For the 90 Per Cent, 439-44
- Mohlman, Dora Keen, and Monroe, Walter S.—Errors Made by High-School Students in One Type of Textbook Study, 36-47
- Monroe, Walter S., and Mohlman, Dora Keen.—Errors Made by High-School Students in One Type of Textbook Study, 36-47
- Morrison, Henry C.—The Readjustment of Our Fundamental Schools, 493-510
- Morrison, Henry C.—Supervised Study, 588-603
- Newcomb, R. S.—The Present Status of the Training of High-School Teachers in Normal Schools and Teachers' Colleges, 380-87
- Nixon, O. F.—The Cost and Financing of Student Publications, 204-12
- Pattee, Edith B.—The Phonograph as a Medium of Foreign-Language Instruction, 604-7
- Pearson, P. H.—Comments on Current Educational Practices in Europe, 294-300
- Perkins, Glen O.—The Elimination of Fraternities and Sororities in the Tucson High School, 224-26
- Perry, Clarence Arthur.—Frequency of Attendance of High-School Students at the Movies, 573-87
- Pittenger, B. F.—Some Factors Governing Enrolment in the Higher State Institutions of Texas, 511-17
- Proctor, William Martin.—The Junior College in California, 363-75
- Rasey, Lee C.—A Program Arrangement for Mental Groups, 608-11
- Richards, Oscar W.—The Present Status of Biology in the Secondary Schools, 143-46
- Roman, Mata.—Voluntary Supplementary Studies in Nutrition, 777-80
- Shideler, J. W.—The Junior-College Movement in Kansas, 460-63
- Shields, Harold G.—Some Shorthand and Typewriting Observations, 464-68
- Siehl, B. H.—A Survey of a Night High School, 533-39
- Snedden, David.—Bobbitt's *Curriculum-making in Los Angeles*, 104-8
- Spencer, Peter L.—The Improvement of Teaching by Means of "Home-made" Non-standard Diagnostic Tests and Remedial Instruction, 276-81
- Wager, Ralph E.—Some Outcomes of the Teaching of History, 213-18
- Yawberg, A. G.—Instructional Supervision with the Announced Visit as an Important Factor, 763-76

## ARTICLES

- Accounting System for High-School Organizations, An, L. F. Jolley, 136-42
- Algebra Tests, Diagnostic, and Remedial Measures, Thomas M. Deam, 376-79
- Anthology, An Experiment in the Use of an, Martha Jane McCoy, 219-23
- Assembly, What to Do with the High-School, Evan E. Evans, 282-86
- Athletics, The High-School Teacher and, C. M. Howe, 781-86
- Biology, The Present Status of, in the Secondary Schools, Oscar W. Richards, 143-46
- Christ, The Life of, in the Upper Sandusky High School, E. H. Brown, 704-6
- Classes, The Size of, and the Teaching Load in the High Schools Accredited by the North Central Association, C. O. Davis, 412-29
- College Records of Graduates of the Steele High School, A Statistical Study of the, A. F. Foerste, 452-59
- College Risk, The Bad, P. W. Horn, 670-79
- College-Admission Requirements in the North Central Association, L. M. Fort, 680-84
- College-Entrance Requirements, The Influence of, on the Public High Schools of New England, Jesse B. Davis, 445-51
- Consolidated Rural High Schools, The Administration of, O. H. Greist, 120-35
- Curriculum, The Los Angeles High-School, W. W. Charters, 95-103



- Curriculum Reconstruction in the High School, Thomas H. Briggs, 109-15
- Curriculum-building in the Rural High School, Emery N. Ferriss, 253-66
- Curriculum-making in Los Angeles*, Bobbitt's, David Snedden, 104-8
- Educational Opportunities for High-School Graduates, Increasing, Grace T. Lewis, 267-75
- Educational Practices in Europe, Comments on Current, P. H. Pearson, 294-300
- Enrolment, Some Factors Governing, in the Higher State Institutions of Texas, B. F. Pittenger, 511-17
- Extra-curricular Activities, An Experiment in Organization and Administration of High-School, Cloy S. Hobson, 116-24
- For the 90 Per Cent, S. C. Mitchell, 439-44
- Foreign-Language Instruction, The Phonograph as a Medium of, Edith B. Pattee, 604-7
- Fraternities, The Decision of the Supreme Court of Illinois on High-School, 332-39
- Fraternities and Sororities, The Elimination of, in the Tucson High School, Glen O. Perkins, 224-26
- French as a Business Proposition for American Students, Harry Kurz, 662-69
- Fundamental Schools, The Readjustment of Our, Henry C. Morrison, 493-510
- History, Some Outcomes of the Teaching of, Ralph E. Wager, 213-18
- Home Economics, A Study in Organization of Food and Clothing Courses in High-School, Leona F. Bowman, 54-66
- Junior College in California, The, William Martin Proctor, 363-75
- Junior-College Movement in Kansas, The, J. W. Shideler, 460-63
- Junior and Senior High Schools, Articulating the, Arthur W. Ferguson, 540-46
- Latin Translations, The Effect of, on English, George R. Miller, Jr., and Thomas H. Briggs, 756-62
- Leadership in Relation to Intelligence, H. S. Bennett and B. R. Jones, 125-28
- Mental Groups, A Program Arrangement for, Lee C. Rasey, 608-11
- Motion Pictures, Requirements of Education with Reference to, Frank N. Freeman, 340-50
- Movies, Education and the, Charles H. Judd, 173-78
- Movies, Frequency of Attendance of High-School Students at the, Clarence Arthur Perry, 573-87
- Night High School, A Survey of a, B. H. Siehl, 533-39
- Nutrition, Voluntary Supplementary Studies in, Mata Roman, 777-80
- Principal, The Managerial Duties of the, H. D. Fillers, 48-53
- Principal's Load, The, Rolland R. John, 748-55
- Principalship, Evolution of the High-School, Forest C. Ensign, 179-90
- Professional Careers, Opportunities for, as High-School Principals, Eugene M. Hinton, 28-35
- Public Speaking in the High School, A. H. Horrall, 287-93
- Publications, The Cost and Financing of Student, O. F. Nixon, 204-12
- Reorganization, The, of the Seventh, Eighth, and Ninth Grades—Program of Studies, James M. Glass, 518-32
- School Government as an Educative Agency, C. P. Archer, 430-38
- Secondary School, What Can the, Do for the Student of Low I.Q.? Margaret M. Alltucker, 653-61
- Secondary-School System of Sweden, The Proposed Reorganization of the, William Asker, 689-703
- Shorthand and Typewriting Observations, Some, Harold G. Shields, 464-68
- Student Activities in the High School, Centralizing, Grace T. Lewis, 612-26
- Supervised Study, Henry C. Morrison, 588-603
- Supervised Study in Mathematics, E. R. Breslich, 733-47
- Supervision, Instructional, with the Announced Visit as an Important Factor, A. G. Yawberg, 763-76
- Teacher's Time, A, Helen H. Cowing, 351-62

- Teachers, July Resolutions of High-School, P. P. Brainard, 685-88
- Teachers, The Preparation of High-School, in Wisconsin Normal Schools, J. O. Frank, 16-27
- Teachers, The Present Status of the Training of High-School, in Normal Schools and Teachers' Colleges, R. S. Newcomb, 380-87
- Teaching, The Improvement of, by Means of "Home-made" Non-standard Diagnostic Tests and Remedial Instruction, Peter L. Spencer, 276-81
- Textbook Study, Errors Made by High-School Students in One Type of, Walter S. Monroe and Dora Keen Mohlman, 36-47
- Training for Power, H. Glicksman, 301-6.
- Vocational Choice, Teaching for the Sake of, in Rural Communities, T. H. Eaton, 191-203

## EDUCATIONAL NEWS AND EDITORIAL COMMENT

1-15, 81-94, 161-72, 241-52, 321-31, 401-11, 481-92, 561-72, 641-52, 721-32

## REVIEWS AND BOOK NOTES

- Allen, Edith, Mechanical Devices in the Home (Lillian Stevenson), 477
- Appleton, R. B., *Ludi Persici* (Lawrence W. Bridge), 75
- Ashley, Roscoe Lewis, The Practice of Citizenship (W. G. Kimmel), 148-49
- Barnes, Walter, The New Democracy in the Teaching of English (R. L. Lyman), 556
- Bement, Alon, Figure Construction (William G. Whitford), 149-50
- Benjamin, Gilbert Giddings, Plum, Harry Grant, and Pierce, Bessie L., Modern and Contemporary European Civilization (Howard C. Hill), 554-55
- Bertaux, Félix; Harvitt, Hélène; and Weeks, Raymond, *A Travers la France* (Arthur Gibbon Bovée), 714-15
- Blachly, Frederick F., and Oatman, Miriam E., Everyday Citizenship (W. G. Kimmel), 229-30
- Black, N. Henry, Laboratory Experiments in Practical Physics (Charles J. Pieper), 792
- Bogardus, Emory S., A History of Social Thought (F. L. Schwass), 77-79
- Bolton, Sarah K., Lives of Girls Who Became Famous (Elsie M. Smithies), 391
- Booth, Charles J., Stubenrauch, A. V., and Wood, Milo N., Horticulture for Schools (O. D. Frank), 237
- Borrowman, Helen I., Card Text System of Cookery (Mata Roman), 793
- Boynton, Percy H., American Literature (Gladys Campbell), 469-70
- Brigham, Carl C., A Study of American Intelligence (Frank N. Freeman), 627-28
- Buhlig, Rose, Junior English (Gladys Campbell), 555-56
- Burton, William H., Supervision and the Improvement of Teaching (F. L. Schwass), 315-16
- Buswell, Guy Thomas, and Judd, Charles Hubbard, Silent Reading: A Study of the Various Types (William A. Smith), 147-48
- Caldwell, O. W., and Finley, C. W., Biology in the Public Press (W. C. Reavis), 472-73
- Carter, Ralph E., and Monroe, Walter S., The Use of Different Types of Thought Questions in Secondary Schools and Their Relative Difficulty for Students, 479
- Christman, John M., Shop Mathematics (E. R. Breslich), 473-74
- Clark, W. B., Preston, James T., Glessner, H. H., Hennessey, D. L., and Wilson, H. B., Junior High Schools of Berkeley, California (Elam J. Anderson), 798-99
- Clement, John Addison, Curriculum Making in Secondary Schools (H. H. Ryan), 548-49
- Coates, Charles Penney, History of the Manual Training School of Washington University (Robert Woellner), 795-96
- Colvin, Carl, and Stevenson, John Alfred, Farm Projects (O. D. Frank), 152-53
- Cooper, Lane, Two Views of Education (Roy Ivan Johnson), 238-39
- Course of Study and Syllabus: Junior High School Mathematics (E. R. Breslich), 70-71
- Cross, E. A., The Little Grammar (Martha Jane McCoy), 150-51
- Cubberley, Ellwood P., The Principal and His School (L. W. Smith), 707-8

- Davis, John W., *Modern Readings* (Edith E. Shepherd), 553-54
- Deffendall, P. H., *Actual Business English* (Roy Ivan Johnson), 72
- Descriptive Booklet: Lincoln School of Teachers College (W. C. Reavis), 75
- Downer, Charles Alfred, and Knickerbocker, William Edwin, *A First Course in French* (Arthur G. Bovée), 393-94
- Doxsee, Herald M., *Getting into Your Life-Work* (Anna Y. Reed), 635-36
- Dyer, Elizabeth, *Textile Fabrics* (Hazel Schultz), 790-91
- Edmonson, J. B., *Problems in Secondary Education* (W. C. Reavis), 547-48
- Ellis, Don Carlos, and Thornborough, Laura, *Motion Pictures in Education* (William A. Brownell), 630-31
- Ferriss, Emery N., *Rural School Survey of New York State: The Rural High School* (Carter V. Good), 631-33
- Findlay, J. J., *The Children of England* (William A. Brownell), 710-11
- Finley, C. W., and Caldwell, O. W., *Biology in the Public Press* (W. C. Reavis), 472-73
- Finney, Ross L., *Elementary Sociology* (E. George Payne), 788-89
- Fougeray, G. P., *The Mastery of French* (A. Marie Côté Weaver), 153-54
- Freeman, C. E. (editor), *Virgil's Aeneid, Books I-III* (H. B. Ash), 231
- Gambrill, Bessie Lee, *College Achievement and Vocational Efficiency* (E. T. Filbey), 230-31
- Garland, Hamlin, *A Son of the Middle Border* (edited by E. H. Kemper McComb) (Ernest Hanes), 476-77
- Gates, Arthur I., *Psychology for Students of Education* (Charles Edward Skinner), 550-52
- Gentile, Giovanni, *The Reform of Education* (Roy Ivan Johnson), 395-96
- Glessner, H. H., Preston, James T., Clark, W. B., Hennessey, D. L., and Wilson, H. B., *Junior High Schools of Berkeley, California* (Elam J. Anderson), 798-99
- Goble, Cathryn R., *Minimum Essentials in English* (R. L. Lyman), 153
- Gordon, Margery, and King, Marie B., *Verse of Our Day* (Martha Jane McCoy), 797-98
- Gordy, Wilbur F., *History of the United States* (Howard C. Hill), 233-34
- Graham, Sybil Fleming, and Morehouse, Frances, *American Problems* (W. G. Kimmel), 392-93
- Greene, L. S., *Supervision of the Special Subjects* (Robert Woellner), 156
- Gregory, Chester Arthur, *Fundamentals of Educational Measurement* (Wilbur L. Beauchamp), 233
- Hammett, C. E., and Lundgren, C. L., *How to Be an Athlete* (W. C. Reavis), 629
- Haney, John Louis, *The Story of Our Literature* (Ernest E. Leisy), 634-35
- Hanna, Agnes K., *Home Economics in the Elementary and Secondary Schools* (Lillian Stevenson), 235-36
- Harper, Herbert Druery; Wentworth, George; and Smith, David Eugene, *Machine Shop Mathematics* (E. R. Breslich), 316-17
- Hart, Walter W., and Wells, Webster, *Modern High School Algebra* (Walter A. Heath), 791-92
- Harvitt, Hélène; Bertaux, Félix; and Weeks, Raymond, *A Travers la France* (Arthur Gibbon Bovée), 714-15
- Hayes, Carlton J. H., and Moon, Parker Thomas, *Modern History* (Heber P. Walker), 475-76
- Health for School Children (Carter V. Good), 797
- Henderson, William Edwards, and McPherson, William, *Chemistry and Its Uses* (Vergil C. Lohr), 72-73
- Hennessey, D. L., Preston, James T., Clark, W. B., Glessner, H. H., and Wilson, H. B., *Junior High Schools of Berkeley, California* (Elam J. Anderson), 798-99
- Hetherington, Clark W., *School Program in Physical Education* (W. C. Reavis), 394-95
- Hines, Harlan Cameron, *Measuring Intelligence* (Paul M. Cook), 796
- History and Social Science Curriculum of the Joliet Township High School (R. M. Tryon), 549-50
- Hitchcock, C. N., *Forms, Records, and Reports in Personnel Administration* (John Munroe), 154-55
- Home Economics Education (Lillian Stevenson), 76-77
- Hughes, R. O., *Problems of American Democracy* (R. M. Tryon), 237-38
- Hyde, Grant Milnor, *A Course in Journalistic Writing* (Gladys Campbell), 228

- Jenks, Jeremiah Whipple, and Smith, Rufus Daniel, *We and Our Government* (W. G. Kimmel), 69-70.
- Judd, Charles Hubbard, and Buswell, Guy Thomas, *Silent Reading: A Study of the Various Types* (William A. Smith), 147-48
- King, Marie B., and Gordon, Margery, *Verse of Our Day* (Martha Jane McCoy), 797-98
- Knickerbocker, Edwin Van B., *Present-Day Essays* (R. L. Lyman), 315
- Knickerbocker, William Edwin, and Downer, Charles Alfred, *A First Course in French* (Arthur G. Bovée), 393-94
- Knight, Frederic Butterfield, *Qualities Related to Success in Teaching* (Roy Ivan Johnson), 234-35
- Kuony, François J., *Pour Apprendre à Parler* (Ethel Preston), 553
- Kuns, Ray F., *Automotive Trade Training* (Robert Woellner), 236-37
- Leeman, Jean, *Paris Pittoresque* (Arthur Gibbon Bovée), 793-94
- Levis, Ella Cannon, *Citizenship: A Practical Textbook in Citizenship* (W. G. Kimmel), 794-95
- Love, Clyde E., *Analytic Geometry* (E. R. Breslich), 477-78
- Lundgren, C. L., and Hammett, C. E., *How to Be an Athlete* (W. C. Reavis), 629
- Luther College through Sixty Years (W. C. Reavis), 152
- Lyon, Leverett S., *Education for Business* (A. G. Belding), 67-69
- Macbeath, A., and White, A. K., *The Moral Self: Its Nature and Development* (J. O. Engleman), 708-9
- McCall, William A., *How to Experiment in Education* (V. A. C. Henmon), 787-88
- McPherson, William, and Henderson, William Edwards, *Chemistry and Its Uses* (Vergil C. Lohr), 72-73
- McSpadden, J. Walker, *Shakesperian Synopses* (Martha Jane McCoy), 390
- Manual for High Schools (W. C. Reavis), 388-89
- Maryland High School Standards (W. C. Reavis), 388-89
- Mauvezin, F., *Rose des Métiers* (Anna Y. Reed), 73-74
- Mead, Arthur Raymond, *Learning and Teaching* (H. H. Ryan), 713
- Meier, W. H. D., *The Study of Living Things* (C. J. Pieper), 229
- Miller, Harry Lloyd, *Directing Study* (R. M. Tryon), 227-28
- Moffett, H. Y., and Ward, C. H., *The Junior Highway to English* (Edith E. Shepherd), 318
- Monroe, Walter S., *An Introduction to the Theory of Educational Measurements* (Karl J. Holzinger), 471-72
- Monroe, Walter S., and Carter, Ralph E., *The Use of Different Types of Thought Questions in Secondary Schools and Their Relative Difficulty for Students*, 479
- Moon, Parker Thomas, and Hayes, Carlton J. H., *Modern History* (Heber P. Walker), 475-76
- Morehouse, Frances, and Graham, Sybil Fleming, *American Problems* (W. G. Kimmel), 392-93
- Munro, William Bennett, and Ozanne, Charles Eugene, *Social Civics* (John Munroe), 157-58
- Neale, M. G., and Severson, S. B., *A School Building Program for the City of Duluth, Minnesota* (F. L. Schwass), 397-98
- Nordgaard, Martin Andrew, *A Historical Survey of Algebraic Methods of Approximating the Roots of Numerical Higher Equations up to the Year 1819* (E. R. Breslich), 236
- Nursing and Nursing Education in the United States (E. George Payne), 470-71
- Oatman, Miriam E., and Blachly, Frederick F., *Everyday Citizenship* (W. G. Kimmel), 229-30
- Ohio High School Standards (W. C. Reavis), 388-89
- O'Shea, M. V., *Tobacco and Mental Efficiency* (Carter V. Good), 711-12
- Ozanne, Charles Eugene, and Munro, William Bennett, *Social Civics* (John Munroe), 157-58
- Parker, Samuel Chester, *Types of Elementary Teaching and Learning* (W. C. Reavis), 391-92
- Pierce, Bessie L., Plum, Harry Grant, and Benjamin, Gilbert Giddings, *Modern and European Civilization* (Howard C. Hill), 554-55
- del Plaine, Frances Kelley, and Swift, Fletcher Harper, *Public School Finance in Minnesota* (John Munroe), 474-75
- Plum, Harry Grant, Benjamin, Gilbert Giddings, and Pierce, Bessie L.,

- Modern and Contemporary European Civilization (Howard C. Hill), 554-55
- Polk, Annie E., Better Speech (Roy Ivan Johnson), 79
- Popenoe, Herbert F., and Ruch, Giles M., Ruch-Popenoe General Science Test (Wilbur L. Beauchamp), 633-34
- Preston, James T., Clark, W. B., Glessner, H. H., Hennessey, D. L., and Wilson, H. B., Junior High Schools of Berkeley, California (Elam J. Anderson), 708-99
- Public Education in Oklahoma (Carter V. Good), 717-18
- Public School System of Arkansas: Digest of General Report (Carter V. Good), 715-17
- Reeve, William David, General Mathematics, Book Two (C. A. Stone), 75-76
- Reisner, Edward H., Nationalism and Education since 1789 (I. N. Edwards), 309-10
- Report of the Survey of the Public Schools of Philadelphia (Frederick S. Breed), 311-12
- Ruch, Giles M., and Popenoe, Herbert F., Ruch-Popenoe General Science Test (Wilbur L. Beauchamp), 633-34
- Ruediger, William C., Vitalized Teaching (W. C. Reavis), 713-14
- Selvidge, Robert W., How to Teach a Trade (Robert Woellner), 712-13
- Severson, S. B., and Neale, M. G., A School Building Program for the City of Duluth, Minnesota (F. L. Schwass), 397-98
- Sharp, Dallas Lore, Education in a Democracy (Heber P. Walker), 155-56
- Smart, Walter Kay, Handbook of Effective Writing (Edith E. Shepherd), 232
- Smith, C. Alphonso, Essays on Current Themes (Martha Jane McCoy), 396-97
- Smith, David Eugene; Wentworth, George; and Harper, Herbert Drury, Machine Shop Mathematics (E. R. Breslich), 316-17
- Smith, H. B., Part-Time Schools (E. T. Filbey), 389-90
- Smith, Homer J., English for Boys and Men (Ernest Hanes), 556-57
- Smith, Rufus Daniel, and Jenks, Jeremiah Whipple, We and Our Government (W. G. Kimmel), 69-70
- Stevenson, John Alfred, and Colvin, Carl, Farm Projects (O. D. Frank), 152-53
- Stubenrauch, A. V., Wood, Milo N., and Booth, Charles J., Horticulture for Schools (O. D. Frank), 237
- Studies in Secondary Education, I, University High School, University of Chicago (George S. Counts), 307-9
- Swift, Fletcher Harper, The Public School System of Arkansas: Public School Finance (Carter V. Good), 715-17
- Swift, Fletcher Harper, and del Plaine, Frances Kelley, Public School Finance in Minnesota (John Munroe), 474-75
- Tanner, William M., Composition and Rhetoric (Roy Ivan Johnson), 310
- Taylor, Howard Cromwell, The Educational Significance of the Early Federal Land Ordinances (John Munroe), 478-79
- Thornborough, Laura, and Ellis, Don Carlos, Motion Pictures in Education (William A. Brownell), 630-31
- Trafton, Gilbert H., Biology of Home and Community (O. D. Frank), 474
- Tressler, J. C., and Williams, William, Composition and Rhetoric by Practice (Martha Jane McCoy), 552
- Visher, Stephen Sargent, Economic Geography of Indiana (Edith P. Parker), 789-90
- Ward, C. H., and Moffett, H. Y., The Junior Highway to English (Edith E. Shepherd), 318
- Waters, Henry Jackson, Elementary Agriculture (O. D. Frank), 397
- Watts, Mary S., Nathan Burke (edited by Clarence Stratton) (Ernest Hanes), 476-77
- Webber, James Plaisted, and Webster, Hanson Hart (editors), One-Act Plays for Secondary Schools (Ernest Hanes), 790
- Webster, Hanson Hart, and Webber, James Plaisted (editors), One-Act Plays for Secondary Schools (Ernest Hanes), 790
- Weeks, Raymond; Bertaux, Félix; and Harvitt, Hélène, *A Travers la France* (Arthur Gibbon Bovée), 714-15
- Wells, H. G., A Short History of the World (Howard C. Hill), 312-14
- Wells, Webster, and Hart, Walter W., Modern High School Algebra (Walter A. Heath), 791-92
- Wentworth, George; Smith, David Eugene; and Harper, Herbert Drury, Machine Shop Mathematics (E. R. Breslich), 316-17

- West, Willis Mason, *The Story of World Progress* (Heber P. Walker), 317-18
- White, A. K., and Macbeath, A., *The Moral Self: Its Nature and Development* (J. O. Engleman), 708-9
- White, William Allen, *A Certain Rich Man* (edited by Mildred B. Flagg) (Ernest Hanes), 476-77
- Wiley, J. A., *Practice Exercises in Supervised Study and Assimilative Reading* (R. L. Lyman), 156-57
- Williams, Jesse Feiring, *The Organization and Administration of Physical Education* (W. J. Monilaw), 232-33
- Williams, William, and Tressler, J. C., *Composition and Rhetoric by Practice* (Martha Jane McCoy), 552
- Wilson, H. B., Preston, James T., Clark, W. B., Glessner, H. H., and Hennessey, D. L., *Junior High Schools of Berkeley, California* (Elam J. Anderson), 798-99
- Woellner, Frederic P., *Education for Citizenship in a Democracy* (R. M. Tryon), 629-30
- Wood, Milo N., Stubenrauch, A. V., and Booth, Charles J., *Horticulture for Schools* (O. D. Frank), 237

## CURRENT PUBLICATIONS RECEIVED

79-80, 158-60, 239-40, 318-20, 398-400, 479-80, 557-60, 636-40, 718-20, 799-800

# THE SCHOOL REVIEW

A JOURNAL OF SECONDARY EDUCATION

VOLUME XXXI

JANUARY, 1923

NUMBER I

022

## Educational News and Editorial Comment

### ANNUAL UNIVERSITY OF CHICAGO DINNER

The dinner of the graduates and former students of the University of Chicago which is held annually in connection with the meeting of the Department of Superintendence will take place in Cleveland, Wednesday, February 28, 1923, at the Cleveland Hotel at 6:30 P.M. The list of speakers includes Dr. L. P. Ayres, Superintendent A. C. Parsons, of Oklahoma City, J. O. Engleman, Field Secretary of the National Education Association, Miss May Hill, of the Cleveland Kindergarten Training School, and representatives of the School of Education Faculty.

Tickets may be purchased by mail by sending checks to Dean W. S. Gray, School of Education, University of Chicago, or they may be purchased at the University of Chicago booth at the exhibit in Cleveland. The price of each ticket is \$2.50.

### THE ORGANIZATION OF HI-Y CLUBS

The following statement has been received from Alexander Inglis, Harvard University:

I have just read with interest the article entitled, "The Hi-Y in Mississippi" by Harry Grant Atkinson in the November issue of the *School Review*. That article quite properly for one who believes in the organization of the Hi-Y



in our public high schools sets forth many of the excellent accomplishments of the Hi-Y in Mississippi, and one must recognize the excellent intent and many admirable points about such an organization. Nevertheless, some interested in public education and particularly in high-school education have serious doubts concerning the advisability of such an organization in any direct or indirect connection with the public high school.

I happen to be one of those thoroughly opposed to the organization of such an institution in connection with the public high school. Whatever may be the universality of aim on the part of the Y.M.C.A., it must be considered essentially as an institution in practice open only to those who are in some way related to an evangelical church. Certainly adherents of the Roman Catholic church, of Jewish congregations, and of some other sects are not likely to find a place in the Y.M.C.A. or its Hi-Y. This means, of course, that the Hi-Y must be an essentially selective organization, by no means equally open to all members of the high school. It follows, therefore, that the development of Hi-Y clubs in public high schools must lead to the organization of selective clubs and must necessarily challenge the establishment of more or less rival clubs by the Roman Catholic church, by the Y.M.H.A., and by other institutions whose tenets are more or less challenged by the establishment of the Hi-Y clubs. Thus may easily arise the development of clashing interests more or less related to religious issues in the public high school. This would follow whether the Hi-Y is directly or indirectly related to the pupils of the public high school. I should like to voice very definite opposition to this whole Hi-Y movement in connection with the public schools.

#### BALLOTING PAROCHIAL SCHOOLS OUT OF EXISTENCE

The campaign which was started in Michigan several years ago to close all parochial schools by state law was transferred this year to the state of Oregon. In Michigan an amendment to the constitution was proposed but was defeated by popular vote. The teachers and officers of public schools co-operated in defeating the measure. It is said that the agreement was reached during the campaign that the parochial schools would submit to supervision if they were allowed to continue. Michigan now has a state law placing all private schools under the supervision of the state Department of Public Instruction.

In Oregon a referendum vote was taken at the last election on a measure described on the official ballot in the following terms:

Requiring any parent or guardian or other person having control, charge, or custody of a child over eight and under sixteen years of age, from and after September 1, 1926, to send such child to a public school during the entire



school year, excepting (a) children physically unable; (b) children who have completed the eighth grade; (c) children between the ages of eight and ten living more than three miles from a public school, except where transportation is furnished; (d) children taught by parent or private teacher.

The vote was in favor of the measure by a majority of about ten thousand out of the two hundred thousand votes cast.

It is to be noted that Oregon has relatively fewer private and parochial schools than have many of the older states. The majority for the law represents in some measure, therefore, merely an expression of satisfaction with existing conditions. There was, however, very vigorous discussion of the matter before the election, and public interest was high as indicated by the large number of votes cast.

It is understood that the matter will be carried at once into the courts on the ground that the law is an infringement of the fundamental rights of American citizens.

The editors of the *School Review* have on earlier occasions pointed out the importance of a reasonable solution of the problem that is presented by the Michigan and Oregon proposals. It is evidently the determination of a great many of the people of this country, probably of a majority, that public schools shall prepare young people for life in the United States. Public instruction means the determination of the language used in the classroom and the maintenance of standards of education. If there is anyone who is opposed to a high grade of education under public control, he must be made to give way. In view of this determination there are open only two possible courses: either parochial schools must put themselves under supervision, or they must close their doors. As between the two policies, it is doubtless wiser that supervision should be provided and accepted. The option seems for the moment to be open to the parochial schools. If they do not accept it quickly, there will probably be other enactments similar to that just ratified in Oregon.

#### METHODS OF CLASSIFYING HIGH-SCHOOL STUDENTS

A valuable contribution to the discussion of pupil classification is made in an article by Principal Milo F. McDonald of the Bushwick High School of New York City published in the *Bulletin of the New*

*York Society for the Experimental Study of Education.* The article is as follows:

Our experience at the Bushwick High School has proved conclusively to my mind that group intelligence tests should not be given to pupils at the time of their entrance. They have a proper place within the elementary school, and should be given there over successive periods, preferably, I should say, at about grade 2-B, then again at grade 6-B, and then again at grade 8-B. The pupil would then enter high school and could present a record of scholastic attainment, as given by teachers' ratings, the value of which must never be ignored; and his intelligence quotient, as arrived at through the group intelligence tests.

There should be in addition to this furnished to the high school some estimate of the pupil's character. The high-school principal would then be in a position to classify the pupils from the elementary school upon true scientific basis. He would have a record of scholastic attainment, an intelligence quotient, and a character rating.

These three furnish criteria for classification. The trouble with the ardent proponent of intelligence tests is that he claims that true classification can be made on but one of these factors. Instead of saying that the intelligence tests supplement teachers' ratings, he makes the ridiculous assertion that they replace such ratings.

The most vital factor in the progress of a high-school pupil is his degree of perseverance, of co-operation, of industry, and of responsibility; yet classification upon the basis of group intelligence tests alone would negative all these factors. I believe, in the present state of experiments dealing with intelligence tests, that the work of the pupil in the classroom and the rating given by his teacher in consequence of it are far more scientific than any I.Q. assigned him as the result of a group intelligence test. I should rather organize a high school on the basis of the experience of elementary-school teachers with pupils than on the basis of a psychological group test alone, because the elementary-school teacher, through her experience, is able to give me not only a record of the pupil's scholastic attainment but also a character rating.

Thus we have from this source two of the three vital factors which I contend to be necessary for the proper classification of pupils, whereas the test, even though it were admitted to be a genuine test, which is doubtful, affords us but one.

There is, further, one valid reason, regardless of the merit of the group intelligence test, which to my mind militates against its place in high school. To be valuable for purposes of classification it will have to be given to the pupil prior to his entrance. To give the test in high school at the time of the pupil's entrance means that it will be set under the most adverse conditions. It will be set at a time when the pupil is in a highly nervous condition, due to his strange surroundings. It will mean that the I.Q. will be simply a record either

of nerve control or of phlegmatic temperament. It will be a physical record, not a mental one.

We have labored for many years to make the articulation close between the elementary school and the high school. For the success of the pupil in high school it is necessary that we establish between the pupil and the school at the very beginning a close bond of sympathy.

The gap between elementary school and high school is a great one. It looms far larger in the mind of the pupil than we ordinarily think it does. We should, therefore, make every effort to place the pupil at his ease during the opening days of his high-school career. To my mind, to bridge the gap effectively between high school and elementary school it would be wise to have in all first classes, both in charge of official sections and in recitation sections, those teachers who have had elementary-school experience.

It would be wise, too, during the first term to keep as far as possible in official classes and in recitation sections pupils who come from the same elementary school. It would be wise, further, to arrange a program whereby sympathetic teachers with elementary experience might teach more than one subject, and so make a better articulation between the elementary school and the high school, particularly for those pupils who are entering for the first time upon departmental work.

A little thought will show that a logical fulfilment of the purposes of those who would classify pupils on the basis of an intelligence test alone demands that all these advantages be scrapped; they must be scrapped if we logically carry out such purposes. It seems to me that it would be well nigh criminal to forego all the advantages which good administration has so clearly demonstrated for a classification upon the basis of a group intelligence test alone, which test is looked upon as but fragmentary at the present time in the minds of all reputable psychologists.

I feel, though, that classification made upon the basis of these tests alone is inevitable unless those who believe that great harm would be done thereby express their opinions not only candidly but forcibly. It is inevitable, too, that the classification must be on the basis of the test alone if the test be given in the high school, since there will be no time to check against the record of scholastic attainments, nor will there be time to check against the character, as the estimate of pupils' attainments in 8-B carries no mention of any character rating.

Classification in high schools on the basis of the group intelligence tests can be valid, too, it would seem, for only the first grade. Beyond that we shall have to decide which is of greater value, promotion by subject or classification by a group intelligence test. One or the other must survive; both cannot.

We have discarded group intelligence tests in the Bushwick High School primarily for the reason that we believe their place is in the elementary school and that they should be given there over successive periods so as to check against possible emotional complex and plateau of development. In accord-

ance with the plan we should like to see followed, the pupil would present himself at high school with a record card showing the following: (1) scholastic attainment, (2) intelligence quotient, (3) character rating.

On the basis of this record classification could be made and an individual intelligence test given to any pupil in the course of the term as occasion warranted. I believe strongly in the merits of the individual intelligence tests, but I believe, too, that it is often necessary in this field to have the record of the psychologist checked by the record of a psychiatrist.

#### REDUCED TIME ALLOTMENT FOR ENGLISH IN THE PROPOSED COURSE FOR CHICAGO HIGH SCHOOLS

The new course of study based on the "Cardinal Principles of Secondary Education" proposed for the Chicago high schools involves a "stem course" required of all pupils, supplemented by major sequences, one of which each pupil may elect. Included are sequences in foreign language, in English, in social studies, and in physical sciences with alternatives of life-sciences or earth sciences, a technical sequence for boys, and a commercial sequence.

The plan is certainly not new in conception; it is merely in keeping with the best practice at present in Chicago and in progressive school systems the country over. Constants in the "stem course" are as follows:

	Number of Periods
First year, first semester:	
English and social studies correlated.....	7
General science.....	5
First-year mathematics.....	5
Health, including one double period for exercise.....	5
Social arts.....	5
First year, second semester:	
Same as first year, first semester, except household science an elective in place of general science	
Second year:	
English.....	5
Human geography and civic biology, one semester each....	5
Health, including one double period for exercise.....	5
Social arts.....	5
Third year:	
English.....	5
Health.....	5
Social arts.....	not fixed
Fourth year:	
Economic, social, and civic problems.....	5
Health.....	5
Social arts.....	not fixed

In addition, one year of United States history is required in all four-year sequences; and one year of laboratory science is required in all four-year sequences in which that subject is not a required study.

If anything is to be regretted concerning this "stem course," it is that such a meager amount of time is allotted to direct courses in citizenship. The committee has doubtless proposed all that is possible at present, sacrificing one year of English, and insisting on at least one course in United States history and one fourth-year course in citizenship problems. It may be said, too, that the commendable health or physical training unit and the equally commendable social-arts unit throughout the four years are indirect courses in citizenship. And it may be insisted that courses in English, if properly taught, may be looked upon as courses in training for citizenship. Correlated English and social studies in the ninth grade certainly points the way.

English teachers of the city, considerably exercised over the proposed reduction in time allotment for their subject, are apparently banded together to oppose the change. Their opposition is based on the fact that in schools with such a large proportion of children from foreign-speaking homes, three units of English is not sufficient. There is some reason in the argument. It may be pointed out, however, that *paper* changes in curricula need to be accompanied by painstaking modification of instructional materials and methods of teaching. Two or perhaps three such changes in English are imperative in a cosmopolitan city like Chicago.

First, the prevailing mistake of an identical program of vernacular study for all pupils must be abandoned. At present teachers of the mother-tongue are compelled to teach in large classes miscellaneous groups of illiterates, foreign-speaking pupils, and pupils of low intelligence, together with pupils whose language attainments are natively correct. The task is impossible. Under the proposed program, in view of the reduced time allotment, English departments should firmly request administrators to face squarely the problem of ability grouping. They should ask for instructional groups of homogeneous attainments and needs; they should find out the best practices in determining groups and should propose

a program. Administrators everywhere are shirking this perfectly obvious need, because it involves difficult problems in the daily time table. A large school, at least, with many sections in every subject, no longer has the slightest excuse for neglecting what common sense prescribes.

Given these homogeneous groups, English departments must then face with resolution the task of differentiating instruction. One thing is certain. The minute analysis of a few English classics, now universally prevailing, and failing in mixed classes, can, if retained at all, succeed only in A grade ability groups. For C ability groups certainly, and for B ability groups probably, there should be substituted an extensive reading program of much simpler and easier literary materials, more in keeping with the assimilative capacities of the pupils involved. This appears especially imperative in the case of manual arts and commercial students. To teach such children to be readers of great literature, especially through the present materials and methods of instruction, is simply out of the question. It cannot be done. Similar differentiation of language instruction should prevail. Some ninth-grade groups of C level should be given rigid training in language and grammar, while other ninth-grade A groups may be ready for fairly advanced courses in writing. In short, if English departments make the demand for ability grouping, they must, to be consistent, be ready to devise a new teaching program to fit ability grouping.

A third change, involving the spirit and practice of the entire school, is equally imperative. The bulletin, "Reorganization of English in the Secondary School," affirms that the "English of the entire school is the business of the entire school." Reading habits cannot be the product of one set of classrooms. In history classes, a fair proportion of pupils ought to acquire the intellectual curiosity which will lead them to read history; it is so in all of the social studies; some pupils should become readers of social themes; it is so in science and in all of the arts. Moreover, language attainments, the accurate and correct uses of English, are not the products of English classes alone or primarily; they are the products of all of the writing and speaking situations in every class in every subject in which the mother-tongue is the medium of



communication. Attitudes of respect for English are more likely to be acquired from the speech habits of teachers of content subjects and by the speech practices demanded of their pupils than from the feverous expostulating and preaching of English teachers. A language conscience is bound to be the outgrowth of the attitude of an entire school, all of the subjects, all of the teachers, all of the language experiences, including the assembly talks of the principal as well as the addresses of distinguished visitors.

The English departments of the Chicago high schools may quite profitably stop worrying about a lost year. Instead, let them demand ability grouping; let them work out programs of differentiated instruction; let them take a resolute lead, having converted their school officers, in making decent English respected and used wherever it is read, spoken, or written within their school buildings. And they may be comforted by the realization that at last they have a splendid chance in the English major sequence to give intensive literary and language training to the relatively few pupils whose tasks and abilities are worthy of the effort.

#### AN INVESTIGATION OF TECHNIQUE IN READING

In this issue the *School Review* presents a suggestive study entitled, "Errors Made by High-School Students in One Type of Textbook Study." In addition to the merits of the investigation itself, and these are worthy, the authors have pointed the way for classroom experiments under controlled conditions which can be performed by any intelligent teacher. Moreover, the investigation is in the secondary-school grades which hitherto have been slighted for experiments in the lower grades; and it concerns reading and study habits, a field in which the careful and minute investigations of the psychological laboratory need to be supplemented by many experiments under classroom conditions. In raising one issue concerning the conduct of this valuable study, the editors feel that they are indicating questions which need further consideration.

The authors presented three paragraphs to ninth-grade pupils, asked them to study each paragraph for a limited time, and warned them that they would be expected to answer questions without reference to the text when their study of each paragraph was

finished. They report four types of major errors in the pupils' replies: the omission of whole ideas, errors in relationships of ideas, other portions of the text predominating in answers, and the introduction of extraneous ideas. These errors are attributed by the investigators to faulty methods of study and to faulty technique in utilizing information in reply to questions.

The first paragraph submitted to the pupils is distinctly descriptive; the second is strictly expository; and the third, difficult to classify, is probably expository. The authors have apparently failed to consider the fact that the *mental set* of good readers is not and ought not to be the same in reading, or even in studying for the sake of answering questions, passages the content of which is so wholly dissimilar as that of the paragraphs in hand. The investigators seem to ignore the fact that the manner of reading or studying any passage is and ought to be determined partly at least by the initial mental set or attitude with which the reader begins. This appears strikingly in the discussion of the first paragraph which opens with the curiosity-provoking idea of an unknown "him" who is approaching the apartment of Lady Rowena. By this narrative interest the attitude of an intelligent reader is rightly determined; he is occupied with curiosity about the "him": Who was he? Why was he approaching the apartment? To ignore this dominating attitude of the reader is faulty thinking.

The assumption, apparently made by the investigators, that the reader ought to get "very distinct and definite ideas" of the details of a descriptive passage, when his mind is anticipating narrative details, is seriously open to question. Ought descriptions in the midst of narratives to be analyzed into details and explicitly remembered? Is not Sir Walter Scott in this particular passage using description merely to create a general *tone* or *background* for the narrative details? Does he desire the reader to dwell upon details? Are not such backgrounds, in literary art as in other art, intended to be quite indistinct in the reader's or the observer's mind, and not intended for "full comprehension" as the authors of this paper assume? And is the meaning of a descriptive passage, which we have called "tone," enhanced by a "clear mental *picture*" of "concrete or materialistic elements," which the authors want?



Yes, possibly enhanced. But meaning lies primarily in the feeling tone the readers experience of the crude and barbaric luxury of the setting involved in those descriptive details. To expect children, given the curiosity-awakening idea of a "him" approaching a lady's apartment, to analyze and remember many details about the color of curtains and designs of embroidery, is to expect the impossible; and, we submit, to ask the undesirable. Upon occasion, for rhetorical training, such descriptive passages even in narrative writing may be assigned for analysis, but in normal reading such passages ought not to be thus consciously distributed into minutiae.

If the authors of this paper intended to make the point that teachers of literature err in asking factual questions concerning descriptive details in narrative writing, the present comment would be quite unjustified. But they do not; they attribute the answers they call "poor" to "faulty technique of study." In short, their thinking seems to rest on the assumption that the same technique of reading applies both to a descriptive passage with a distinctly narrative setting and to a wholly informative passage of expository writing. This is to assume that reading is reading, quite ignoring the nature of the material and the attitudes of the reader. This is to assume that study is study, always demanding the same mental processes, and always to be judged by the same goals or standards of achievement.

The fact is that the authors seem to have investigated, not "one type," but at least two types of textbook study; they have failed to distinguish between two quite different reading or study situations. Such confused thinking is largely prevalent in school practice. It indicates how far we have yet to go to understand rightly the true nature of the mental processes in reading and in studying and to adapt instruction to that right understanding.

R. L. L.

#### SHALL NORMAL SCHOOLS TRAIN HIGH-SCHOOL TEACHERS?

The article by Mr. Frank which is published in this issue of the *School Review* raises a very important question of educational policy, namely, the question, Shall normal schools train high-school teachers?

If they do, there is grave danger that funds and equipment very much needed for the training of elementary-school teachers will be consumed and that there will continue to be, as there always has been in years past, a lack of trained teachers for the grades.

If normal schools train high-school teachers, they ought to have equipment for senior-college courses which they do not now have. The teachers on the normal-school faculties ought to have academic training which they do not now have. The schools ought to have library equipment and laboratory equipment which they do not now have.

On the other hand, it is to be pointed out that the colleges of most of the states are not dealing adequately with the problem of training high-school teachers. Many of the colleges are less well equipped than the normal schools, and too many of them are not giving serious attention to professional training. In many colleges the so-called professional courses for teachers are mere farces. They are nothing but conventional academic courses with a new name.

There can be no doubt that the facts which Mr. Frank records are in large measure the result of the inadequacies of college training rather than the result of deliberate equipment on the part of the state of its normal schools for the training of high-school teachers. Indeed, the states, like the colleges, have been very slow to concern themselves with special professional training for teachers in the high schools. The large influence of the normal schools in this field is therefore a kind of accident rather than a deliberate policy.

The future cannot be left to the operation of accidental policy, hence the timeliness of Mr. Frank's discussion. It would seem logical to infer from his analysis of the situation that the state must recognize the training of high-school teachers as a legitimate function of the normal schools and must equip them for the task, or it must provide some other agency.

It is certainly not legitimate for anyone to hold in the present situation that the normal school is to be denied recognition for a genuine service which it is rendering. Nor can anyone hold, because it is doing what it is, that it can properly claim the right to control

the training of high-school teachers in the state. The present situation is not a solution of the problem. It is a fact, little understood and by no means stabilized by deliberate intent.

#### RETENTION OF HIGH-SCHOOL PUPILS

The State Department of Education of New York makes a demand for more vigorous efforts to increase the holding power of high schools in an article which appears in the latest official bulletin. This article is quoted herewith. The prefatory comment appropriate to the quotation is that even at the rate indicated by the figures given, the holding power of the high schools is such as to constitute a serious financial problem for most communities. There is doubtless justification for the demand that the high schools strive to retain pupils. Along with the campaign for retention must be carried on a campaign which shall convince communities that it is of the highest importance for the social and economic life of the nation that adequate facilities be provided to give as nearly a universal higher education as our young people can be induced to take. The article in question is as follows:

One section of the annual report prepared by city and village superintendents gives the progress record of the high-school class graduated in June preceding the preparation of the report. Lately, a study was made of these data from high schools in cities of the third class. The report included forty cities. It showed the loss (*a*) at the close of the elementary school and (*b*) during the high-school period. The essential facts of the study are summarized in the two following statements:

"Sixteen per cent of all pupils who were graduated from the elementary schools of these forty cities in June, 1917, failed to enter their local high schools the following year.

"Twenty-five per cent of the 945 pupils who entered these high schools from 'districts not containing academic departments' were graduated in June, while 30.9 per cent of pupils entering from the local schools were graduated on scheduled time. Of the total of 5,095 who entered in 1917-18, 1,522, or 29.87 per cent, were graduated at the close of the four-year period, or June, 1921."

The figures given do not include the pupils who moved to other high schools or who entered from other schools maintaining academic departments. It is probable that where so many schools are concerned, the two items would balance each other. Neither does the percentage given show how many high-school pupils were graduated in less than the four years, nor how many, retarded

one or more terms, were graduated later. The retarded group was undoubtedly larger than the accelerated group. Such retardation is a loss although not of the same degree as total elimination from school.

It should be kept in mind that the figures given may vary from year to year and might not be the same for high schools in smaller or larger cities. The facts remain, however, that in these cities of the third class, 16 per cent of the pupils who were graduated from elementary school failed to enter high school; and that 70 per cent of those who entered high school either dropped out of school or failed to be graduated at the end of the four-year period. The study indicates a need for finding the holding power of all high schools in the state over a period of years, and for determining the influence of the different factors which tend to cause such loss during the high-school period.

#### EVOLUTION IN SCHOOLS

It is predicted that several legislatures will be asked during the present winter to pass laws forbidding public institutions to teach biological evolution. The following quotation from a recent issue of *Science* describes the move which has been made in this direction in Minnesota.

It was reported in *Science* last week that at a conference in St. Paul, Minnesota, of pastors representing Baptist, Congregational, Presbyterian, and Lutheran churches, it was decided to issue a call for a state-wide meeting of Protestant ministers to oppose the teaching of evolution in the public schools of Minnesota.

At this meeting, which was held on October 26, the following resolutions were passed:

*"Preamble*—As American citizens we believe in the complete separation of church and state, and are opposed to religious teaching in public schools—higher or lower.

*"As those who wish to teach Christianity must support their private schools, we believe it but just that those who wish to teach anti-Christian theories should be forbidden the use of tax-supported schools for propagating their opinions.*

*"Whereas, The evolutionary hypothesis has come to be accepted by many American teachers, and is increasingly taught in the public schools of Minnesota, including high schools, our state normals and state university, and*

*"Whereas, This hypothesis, after sixty-three years of study, remains wholly unproven, and has increasingly shown itself to be a foe to the Christian faith, denying as it does the veracity of the Scriptures,*

*"Therefore be it resolved, That we, citizens of Minnesota, representing thousands of our fellow citizens, hereby utter our protest against this propaganda of infidelity, palmed off in the name of science, and we call upon the trustees*

of state institutions to demand of teachers a cessation of such teaching and the removal from our schools of such textbooks as favorably present the same.

"We do this in the interest of true science vs. science falsely so-called; and in the interest of fair dealing.

"We hold that the first amendment to the Constitution of the United States, 'Congress shall make no law respecting an establishment of religion,' was never intended to be interpreted that the state should become sponsor for irreligion; and that it is manifestly unfair to impose taxes upon Christian taxpayers to inculcate teaching inimical to the Bible and destructive of civilization itself.

"We have waited patiently for this hypothesis either to prove a truth or to pass from public instruction. Having now no prospect of either, we demand that the state shall prove its impartiality toward its citizens by dispensing with a subject that is utterly divisive; and is, in the judgment of thousands of its taxpayers, utterly false.

"And we declare that if the school authorities prove derelict in the enforcement of the law relating to the teaching of religion or of theories subversive of the Christian faith, we will appeal to the legislature for the enactment of such laws as shall eliminate from our tax-supported school system this antiscientific and antiscriptural theory of the origin of man and the universe."

History seems to repeat itself in curious cycles. There was a time when the theory that the earth moves around the sun was condemned as not proved. At a later epoch certain legislators thought by enactment of laws to change the mathematical fact known as pi. Today there is an evident willingness on the part of some of our contemporaries to repudiate all of the facts which agriculture has come to regard as fundamental to the scientific breeding of plants and animals, all of the facts that social science has found to be productive for an understanding of civilization, and all of the facts which embryology and comparative anatomy have established. In place of these useful scientific generalizations is to be set up a legislative negation. It is interesting to live at a time when such curious psychological manifestations can come back to illustrate what medieval bigotry and modern ignorance were like.

## THE PREPARATION OF HIGH-SCHOOL TEACHERS IN WISCONSIN NORMAL SCHOOLS

J. O. FRANK

State Normal School, Oshkosh, Wisconsin

### NORMAL SCHOOLS THE CHIEF AGENCY FOR TRAINING HIGH-SCHOOL TEACHERS IN WISCONSIN

During the past twenty years the state normal schools of Wisconsin have passed through a series of fundamental changes. Originally functioning as training schools for the preparation of elementary-school teachers, they are today not only serving in this field, but they have become the most important agency in the state for the preparation of high-school teachers. The state superintendent of public instruction, in his report<sup>1</sup> for the biennium 1918-20, states that the normal schools of Wisconsin are now preparing more high-school teachers than the state University and all of the colleges of the state combined.

The proportion of high-school teachers trained in the normal schools as compared with the number trained in the colleges and in the University of Wisconsin, is shown in the following facts. In the three-year period from 1917-18 to 1919-20, the number of high-school teachers in Wisconsin who have received their training at the University of Wisconsin decreased from 24.6 per cent to 22.7 per cent. In the same period, the number of high-school teachers who had been trained in the Wisconsin colleges increased from 11.1 per cent to 13.7 per cent. Thus, in 1919-20, all of the colleges of the state and the University of Wisconsin combined had trained 36.4 per cent of the high-school teachers of the state. The number prepared in Wisconsin normal schools in the same three-year period increased from 30.5 per cent to 37.4 per cent. State normal schools outside of Wisconsin prepared three times as many of the high-school teachers teaching in the state in 1919-20

<sup>1</sup> C. P. Cary, *Biennial Report of the State Department of Public Instruction for 1918-20*, pp. 14-15.

as in 1917-18. It appears, then, that the state is coming to depend more and more on state normal schools for its supply of high-school teachers.

#### ASPECTS OF NORMAL-SCHOOL DEVELOPMENT

1. *Normal schools have greatly elevated their standards.*—In 1910 many of the Wisconsin normal schools abolished the elementary curricula which required only an eighth-grade diploma for admission. In 1911 the four-year curricula, which were at least half subcollegiate, were abolished in several schools, thus making high-school graduation a requirement for entrance to all but a very few of the normal-school curricula. It would seem that the normal schools should have immediately become important factors in the preparation of high-school teachers, and it is true that the smaller high schools did seek normal-school graduates in considerable numbers.

2. *Certain influences have tended to keep normal schools from preparing high-school teachers.*—The North Central Association of Colleges and Secondary Schools adopted a ruling to the effect that high schools would be accredited only in cases in which the teaching was done by teachers who were graduates of colleges belonging to the Association, or the equivalent. This ruling effectively prevented normal-school graduates from getting positions as teachers in the larger high schools, and it had a tendency to force students who wished to become high-school teachers into the colleges and the universities.

There was another influence which affected the general situation with reference to high-school teaching. This was the apathetic attitude of the public toward trained teachers. The inertia of the old idea that the possession of knowledge alone made one a teacher prevailed for a long time. Knowledge was thought to be the great essential. In the colleges and universities the Ph.D. degree made one a personage who was looked upon as a teacher of importance, though in many cases the work leading to this degree had made the person anything but a teacher. This idea of the university carried over into the high schools, and anyone with the A.B. degree was considered a teacher. It was not thought necessary



for one to know how to teach, or to know many things or to be many things that we now consider essential to effective teaching in the high school.

3. *Four-year courses for the preparation of high-school teachers have been adopted.*—During the past year it has become evident that the normal schools must offer a more complete course for the preparation of high-school teachers if they are to meet the needs of Wisconsin high schools. The four-year course has been authorized and established in each of the nine normal schools in the state, thus making them state teachers' colleges. The four-year curriculum as established at Oshkosh is made up of work of standard college grade throughout, and the courses have been selected with the needs of Wisconsin high schools in mind.

#### ELEMENTS IN THE CURRICULUM FOR THE TRAINING OF HIGH-SCHOOL TEACHERS AT OSHKOSH<sup>1</sup>

While the normal schools in Wisconsin are in close touch with each other through their presidents, regents, and the normal-school teachers' association, they are in no way bound to give courses that are exactly alike. The curricula offered by the nine normal schools for the preparation of high-school teachers vary to some extent, and each curriculum represents the interpretation of the president and faculty of the information available as to the needs of teachers in the field.

The four-year curriculum at Oshkosh includes four groups of studies, each intended to do a very definite thing.

1. *Foundation and culture.*—This includes a group of studies required of each student, which is directed mainly toward the individual development of the teacher. It consists primarily of courses to give the prospective teacher the necessary breadth of scholarship and culture. The courses making up this group are as follows: corrective and cultural English, educational biology, political science, elements of economics, educational sociology, physical education, and free electives to fill in deficiencies in undergraduate education.

<sup>1</sup> The curriculum and plan for preparing high-school teachers described in this paper was organized by President H. A. Brown and presented to the Board of Regents for adoption. It was approved and authorized September 6, 1921.



2. *Academic instruction.*—A plan of work designed to give the student a thorough knowledge of the subjects he is to teach is required of all. This work is organized as follows: major subject, 3 years; first minor subject, 2 years; second minor subject, 1½ years.

3. *Professional training.*—This is intended to give the student a thorough knowledge of the fundamental principles of teaching together with skill in technique through their use in actual classroom instruction. The professional training is divided into two distinct parts. One is professional instruction, consisting of the following courses: introduction to secondary education, educational psychology, principles of secondary education, methods of teaching in secondary schools, and secondary-school organization and administration. The other is instruction through supervised teaching, which includes teaching activities carried on by the student under the direction of expert supervisors, namely, observation, apprentice work, apprentice teaching, and supervised teaching.

4. *Training in extra-curricula activities.*—This training is carried on informally. The State Normal School at Oshkosh maintains a band, an orchestra, a men's glee club, a women's glee club, an oratorical society, a debating society, several literary societies, a men's athletic association, and a women's athletic association. In addition, there are departmental clubs which are open to all students. Any student who wishes to do so may participate in any of these various organizations and, by the proper effort, learn how to conduct similar organizations in high schools. In the musical, athletic, and oratorical organizations considerable care is taken to give suggestions and helpful instruction to those who are interested in the work of these organizations, primarily that they may conduct similar organizations in the high school.

As high-school aims and organization are now understood, it seems to be very necessary that every high-school teacher be able to organize and supervise at least one of the various activities outside of the classroom that are now thought to be essential to high-school work. This training, while carried on informally, is nevertheless very effective and may be considered one of the most important phases of normal-school instruction.

### OUTLINE OF FOUR-YEAR CURRICULUM FOR TRAINING HIGH-SCHOOL TEACHERS AND PRINCIPALS

#### *Freshman Year*

FIRST SEMESTER		SECOND SEMESTER	
	Credits		Credits
English Composition 1a.....	3	English Composition 1b.....	3
Electives.....	15	Educational Biology 1.....	2
Elementary Gymnastics.....	R	Electives.....	13
	18	Elementary Gymnastics.....	R
			18

#### *Sophomore Year*

FIRST SEMESTER		SECOND SEMESTER	
	Credits		Credits
Educational Psychology 4a.....	3	Educational Psychology 4b.....	3
Political Science 1.....	4	Economics 1.....	4
Electives.....	11	Electives.....	11
	18		18

#### *Junior Year*

FIRST SEMESTER		SECOND SEMESTER	
	Credits		Credits
Educational Sociology.....	2	Secondary Education.....	3
Observation, Apprentice Work, and Apprentice Teaching...(2)	1	Observation, Apprentice Work, and Apprentice Teaching...(2)	1
Introduction to Secondary Edu- cation.....	1	Electives.....	14
Electives.....	14		18
	18		

#### *Senior Year*

FIRST SEMESTER		SECOND SEMESTER	
	Credits		Credits
Methods of Teaching in Secon- dary Schools.....6 or 9		Secondary School Organization and Administration.....	3
Supervised Teaching 3a.....	5	Supervised Teaching 3b.....	5
Electives.....7 or 4		Electives.....	10
	18		18

R = Required, but no credit given

#### THE GROUP ELECTIVE PLAN

Each student is required to arrange his course in accordance with the requirements of the group elective plan. All of the studies offered in this course are arranged in groups, as follows: I. English, Latin, French. II. History and government. III.

Economics and sociology. IV. Geography and geology. V. Biology, chemistry, physics, elementary science. VI. Mathematics. VII. Manual arts.

Each student selects one major subject and two minor subjects. Not more than two of the major and minor studies may be in one group. It is possible for the three to be in different groups. In order to be eligible for graduation, a student must complete 144 hours of work, of which fifty-eight are required. Each student must complete major and minor requirements as follows: (a) in the major subject, at least thirty hours; (b) in the first minor subject, at least twenty hours; (c) in the second minor subject, at least fifteen hours. This leaves twenty-one hours of free electives to be chosen by the student in consultation with his faculty adviser. These must be so chosen as to make a well-rounded course in the student's special line of work and give a broad general education.

A student may select three majors or two majors and a minor, provided he secures not less than a total of sixty-five credits in the three subjects and not less than fifteen credits in any one subject.

In each subject which a student chooses for his major or his minors, he takes in addition to his major and minor requirements a course in the methods of teaching that subject.

For the course called *Methods of Teaching in Secondary Schools* in the outline of the curriculum, each student is required to elect three courses in the specific method of teaching, each of which continues throughout one semester of the Senior year, three periods per week. In case any student's major and minor subjects are so chosen that they fall in two groups instead of three, he is required to take only two of these courses. The student in this case elects additional hours of work either in the subject-matter of his major and minors or in his free electives. The student must, of course, choose the courses in methods which correspond to his major and minor subjects.

While this course is listed as a single course in the first semester, the actual courses of which it is constituted are taken at the time that the student is doing his practice-teaching. For example, a student who has his practice in the major subject in the first semester will take the appropriate methods course during that semester.

In the second semester he will have practice in his minor and the methods course appropriate to it.

The specific methods courses from which each student must select two or three are as follows: The Teaching of High School Science, The Teaching of Foreign Languages in High Schools, The Teaching of High School Mathematics, The Teaching of High School History, The Teaching of High School English, and The Teaching of High School Geography.

The practice-teaching requirement is as follows: (a) One semester of daily practice in the student's major subject and (b) one quarter of daily practice in each minor.

#### CONTENT AND PURPOSE OF THE VARIOUS SUBJECTS

The following is a rather general account of the content and purpose of the courses in the various groups mentioned. Each student takes a group of studies called the foundation and culture group. This is work intended to bring the student's general knowledge and culture up to a definite standard and to give him a sufficient foundation for the mastery of the courses that follow.

1. *Corrective and cultural English*, consisting of a course in English expression. The student continues this course in various classes until his command of English has reached a very definite standard. Students who measure up to this standard on entrance are excused from the course.

2. *Educational Biology*, which is a course designed to give the student a good general knowledge of the great biological facts of life. A history of the development of our physical environment—evolution, heredity, eugenics, and similar topics—is included. This serves as a foundation for educational psychology, economics, and political science, as well as a background for the courses in science chosen as majors and minors. In a word, it is a course designed to give the student orientation, perspective, and background—a broadening course.

3. *Political Science*, in which a study is made of the government of the United States, including the historical development of American political institutions, together with the organization of municipal and state governments and their nature and functions.

This course is designed to leave the student with a real understanding of the fundamental principles of government and an appreciation of democratic ideals as exemplified in the American commonwealth. It is essentially a preparation for citizenship.

4. *Elementary Economics*, consisting of a study of the principles underlying production, exchange, distribution and consumption of wealth, and similar fundamental principles and concepts of economics, including tariff, money and banking, capital, and labor. The course is designed to give the student an understanding of the great economic principles that underlie our life and institutions.

5. *Educational Sociology*, in which the people of Wisconsin are studied from the standpoint of various aspects of their life and development which relate to the public schools, including origin and history of the various racial types, defective and delinquent classes, corrective laws and institutions of Wisconsin, and the aims of the various educational agencies.

6. *Physical Education*, a compulsory course for all persons physically able, designed to give the student a knowledge and a liking for habits of exercise and physical recreation necessary for the production and maintenance of health and efficiency.

#### REQUIRED ACADEMIC WORK

Since the required academic work depends largely on the high-school subject or subjects which the student is preparing to teach, we shall have to indicate a particular line of work for the remainder of this paper. We shall assume, for purposes of illustration, that the student has chosen as his field science and mathematics: chemistry as the major subject, physics as the first minor, and mathematics as the second minor.

Intensive training in the field chosen as the major and a good general understanding of one or two allied subjects are required. Work covering what would be a requirement for graduation in the corresponding courses in a university or college is done by students preparing to teach. For instance, a student taking a major in chemistry at the State Normal School at Oshkosh would be required to take three years of chemistry. If he had minors in physics and mathematics, his work would include the following:

*Major in chemistry: three years*

1. General chemistry . . . . . 1 semester
2. General chemistry and qualitative analysis. . . . . 1 semester
3. Gravimetrics, including electro-chemistry and technical analysis. . . . . 1 semester
4. Volumetrics, including gas analysis. . . . . 1 semester
5. Organic chemistry. . . . . 1 semester
6. Industrial chemistry. . . . . 1 semester

*First minor in physics: two years*

1. General physics. . . . . 2 semesters
2. Advanced physics. . . . . 2 semesters

*Second minor in mathematics: one and one-half years*

1. Advanced algebra, trigonometry, and analytic geometry. . . 2 semesters
2. Calculus. . . . . 1 semester

## INSTRUCTION IN PROFESSIONAL SUBJECTS

Classroom instruction in professional subjects is given which is designed to give the student a knowledge of the best methods of instruction and of the specific technique of instruction in the subjects which he is preparing to teach, as well as a good knowledge of school organization and management and an intelligent view of school practice in general. The following courses are required:

1. *Secondary Education*.—This course continues for three hours per week during one semester. It is a course dealing with the high school in relation to its origin and evolution to modern types, the junior high school movement, vocational instruction, the curricula of typical high schools and the place of the various subjects, a review of literature dealing with high-school instruction in its various phases, and a consideration of the methods of teaching the high-school subjects. The course is intended to give a good understanding of the general technique of high-school instruction.

2. *Educational Psychology*.—This is a three-hour course continuing through the second year. It is intended to leave the student with an understanding of the more significant facts of psychology on which the educational methods of the high school are based, including a thorough understanding of such topics as fatigue, habit and memory, the learning process, individual differences, sex differences, diagnosis of capacities, vocational guidance, and similar subjects.

3. *Methods of Teaching in Secondary Schools.*—These courses are automatically elected by the student when he elects his major and minor subjects. Each course deals with the specific problems of teaching in the field it covers, with special attention to the conditions in Wisconsin high schools. The aims of the course, the ground to be covered, selection and arrangement of material, textbooks, special methods and devices, and means of measuring achievement are all typical phases of these courses. The courses are generally given by the supervisor of the same work in the training department. Thus, the student will have *Methods of Teaching High School English* at the same time and under the same instructor with whom he has his practice or apprentice teaching. These courses run through one semester and are three-hour courses.

4. *Secondary School Organization and Administration.*—An intensive study is made of the high school as an institution from the administrative standpoint. The history, development, and present-day aims of secondary education are reviewed. The organization and administration of large and small high schools are considered. The purpose and the place of the various high-school courses and a study of the high-school curriculum are included. Modern tendencies in high-school management receive especial attention. The social life of the high school, high-school athletics, musical organizations, literary societies, and other extra-curricula activities are thoroughly discussed.

#### INSTRUCTION THROUGH SUPERVISED TEACHING

The method of training through practice-teaching is based on the principle that the student learns to teach by actually taking on the duties of the teacher, little by little, under the supervision of an experienced teacher of proved ability, until he has acquired the proper standard of ability to instruct. It is intended that as the prospective teacher gradually takes on the various duties and responsibilities of the work, he shall have instruction in methods that will enable him to understand exactly what is being done. Instruction through supervised teaching is divided into four progressive phases:

1. *Observation.*—The student first comes into contact with the actual work of teaching as an observer. He spends two or three



hours each week observing the teacher handle the class, listening to the questions asked, noting the methods used in keeping records, and absorbing as much information as he can regarding the technique of teaching as exemplified by the work done by the teacher in charge of the class. At the same time he attends the conferences held once a week at which he hears the discussions of the various phases of the work and listens to the instructions given the apprentice and practice-teachers. He has a chance to ask questions about anything which he does not clearly understand and listens to the questions asked by the other students regarding the work.

2. *Apprentice work.*—During the third year the student begins his apprentice work in which he does no actual teaching but performs various duties about the classroom or laboratory as seem best fitted to put him in the closest touch with the actual work being done. In the chemical laboratory, for example, the apprentice teacher will set up apparatus, fill bottles, help equip desks with apparatus, and take on other duties which will give him the closest insight into the actual working of the laboratory. In the classroom the apprentice teacher will keep class roll, assist in desk demonstrations, file excuses for absence, assist in grading notebooks and examination papers, and keep a record of recitations in quiz work to be compared later with the teacher's record on the same recitations. All of this work is designed to give him an insight into the methods of teaching and the actual conditions to be met.

3. *Apprentice teaching.*—Here the student has a preliminary form of practice-teaching under the careful supervision of an experienced teacher of known ability, beginning with small groups or individual students who need special help. In the chemistry laboratory he has charge of a group of six or eight students whom he must help and advise on all phases of the laboratory work. The personnel of these groups is changed from time to time so that he may benefit by contact with all sorts of students. At the conference, the work of the week immediately ahead is carefully gone over, all ambiguous points cleared, and agreement reached concerning any changes which are to be made. At the conference, also, instructions are given the practice-teachers about practical application of the various theories learned in the methods classes.



4. *Supervised teaching.*—The student who has successfully passed the requirements in observation, apprentice work, and apprentice teaching is finally given complete charge of a high-school class which must be taught successfully through the semester. The teaching is done under the supervision of the director of the department, who keeps in very close touch with the work done at all times. As errors are made and as problems present themselves, the supervisor advises the student teacher and in every way assists to make the teaching successful. At the same time the work in high-school organization and administration and the classes in methods are made to assist in making the practice-teaching effective. Every student must teach successfully under supervision for two semesters before graduation. From this requirement no one is excused. The student who does not succeed before the end of the year in reaching a certain definite standard of teaching is not allowed to graduate. In other words, the final test which determines whether the student is to receive the diploma of the school is his ability to teach competently and to manage a class successfully. The student who does not attain this standard before the end of his year of practice-teaching, though he may have passed all other requirements, must remain for further work before he can receive a diploma. 11

#### THE FUTURE OF THE NORMAL SCHOOL

It appears certain that the state normal schools of Wisconsin will in a short time become degree-granting state teachers' colleges, and, as such, they will give to the state a greatly increased percentage of its high-school teachers. At the same time the state university will gradually cease to be an important factor in the production of high-school teachers, except in the post-graduate field, which, after all, is its real sphere in the training of teachers. The colleges of the state will at the same time disappear largely from the field of teacher-preparation. The natural place for the young people of the state to seek professional preparation for teaching of all kinds will be in the state's own tax-supported teachers' colleges.

## OPPORTUNITIES FOR PROFESSIONAL CAREERS AS HIGH-SCHOOL PRINCIPALS

---

EUGENE M. HINTON  
Culver Military Academy

---

During the past few years widespread interest has been manifested in the advantages and disadvantages of professional careers in education. As a result, a number of investigations have been made for the purpose of collecting and presenting facts regarding the exact nature of the work which various types of educational men have to perform. Since no comprehensive treatment of the professional career of the high-school principal was available, the writer undertook in the spring of 1922 an investigation designed to ascertain the opportunities offered and the personal characteristics required in this field of educational work.

As it was impracticable to collect through personal conferences all of the data necessary, a list of questions covering a rather complete analysis of the work of the high-school principal was prepared and placed in the hands of a carefully selected group of representative principals in the states of the Middle West. These principals were located in cities ranging in population from 300 to 3,000,000, and were working in high schools in which the enrolment varied from 5 to 3,950. Their salaries ranged from \$675 to \$7,500 per annum; their ages, from twenty-two to sixty-one years; and their professional experience, from one to forty-four years.

Exactly one hundred replies were received, subject to the criticisms and limitations common to all questionnaire studies. The satisfactory character of most of the replies, however, together with the numerous comments which were added, indicated that the list of principals had been carefully selected.

It is the purpose of this article to summarize the replies of these one hundred representative principals with respect to (1) the professional characteristics of high-school principals, (2) the nature of the opportunities in principalships, and (3) the types of men who are best fitted for professional careers as high-school principals.

Because of the looseness with which the term "professional" has been used, it is necessary at the outset to set down a definition which will interpret the meaning implied in the discussion which follows.

Weaver defines a "professional" man or woman as "one who has mastered the accumulated knowledge of the age in some one special field and has acquired some skill in applying that knowledge to increase the comfort of men in the progress of industry or the welfare of society, and whose primary motive in life is one of service rather than of personal profit."<sup>1</sup>

Using this definition as a guide, we find it imperative to justify only one item pertaining to the "professional" aspect of the high-school principalship, the mastery "of the accumulated knowledge of the age." It has long been universally accepted that every good school executive or teacher helps "to increase . . . the welfare of society." Furthermore, no one has the boldness to deny the statement that a high-school principal's "primary motive in life is one of service rather than of personal profit."

#### PROFESSIONAL CHARACTERISTICS OF HIGH-SCHOOL PRINCIPALS

It is necessary in this connection to discuss such facts concerning principals as the preparation which they have made for their work, the experience which they have had in actual teaching, the motives which induced them to enter the profession, the probable period of time which they will spend in service, and the attitude which they have toward their work.

It must be admitted that many high-school principals have not been thoroughly trained for their work. However, these men are, for the most part, in charge of the smaller schools. As soon as a principal acquires further basic knowledge regarding his work, he usually advances to a larger school. In other words, the better prepared a principal is for his work, the more rapid is his advancement. For this reason, ambitious principals are more likely to take advantage of the opportunities for professional training. Many of them hold the Master's degree in education, for they realize that without such professional preparation few principals can expect to advance very far in their work.

<sup>1</sup> E. W. Weaver, *Building a Career*, p. 60. New York: Association Press, 1922.

In addition to the schooling which a principal must have, a period of actual teaching experience is desirable for the purpose of acquiring practical knowledge. The typical principal spends at least one year as a high-school teacher. If a high degree of proficiency is desired, from four to six years as a high-school teacher in various schools or in different departments of a large school are required.

Yet no definite amount of schooling and experience alone can make a principal a real success. He must have the right attitude toward his work. This attitude is based largely on the motives which induced him to enter the profession. The most common motive is some temporary reason, such as the ability to realize a larger initial salary than is possible in other lines of work for which one is qualified. One primary purpose is to earn money to continue one's schooling or to pay off a debt before undertaking some other field of work. However, it is significant to note that a very large percentage of the men who enter the profession for this reason find their work so attractive that they eventually decide to remain in it. They find that they have developed a natural liking for and a keen interest in young people and are attracted by the opportunity to render effective "social-civic" service.

There are very few professionally alert principals who do not plan to continue in the profession for the rest of their natural lives. Their work is, indeed, a life-work and not merely a job to hold until something better turns up. Of the one hundred representative principals who were questioned regarding their professional future, but a very small percentage stated that they planned to transfer to any other line of work. Most of those who looked forward to a change hoped to go into a superintendency or to enter the field of college teaching. They gave as the main reason the opinion that the transfer would put them in a position to render greater professional service and at the same time permit them to realize a larger income.

The typical principal finds school work so attractive that, in spite of any disadvantages which it may offer, he plans to make it his life-work. He is truly a professional man, in that he has made and is continuing to make an effort to master "the accumulated

knowledge of the age" in his specialized field; he "has acquired some skill in applying that knowledge to increase . . . the welfare of society"; and he has as his "primary motive in life" the idea "of service rather than of personal profit."

#### THE NATURE OF THE OPPORTUNITIES IN PRINCIPALSHIPS

A principal, like every other professional man, must have adequate opportunity for professional, business, and social contacts. He must have time for sufficient recreation to maintain his physical fitness. He must be assured of ample remuneration so that his work will appeal to him as does the work of the other professions. There are sufficient opportunities for making each of these contacts.

There are many unusual opportunities for professional advancement after the principal has begun his work. The one most commonly employed is summer-school attendance. Many younger principals of the smaller schools find it advantageous to attend summer school periodically, if not regularly. The principals of the larger schools, when not under contract for twelve months, find opportunity to spend their summer vacations in study or in instructing in normal schools and colleges. Thus they, too, are broadened, and their opportunities for professional advancement are increased.

There is also opportunity for home study in the form of professional reading, the carrying out of experiments in one's school, study by correspondence, the directing of reading circles, etc. Contacts made through the state teachers' association and the National Education Association aid materially in a principal's professional advancement by broadening his outlook, by inspiring him to further study, and by opening up to him larger fields of service. Again, there are all sorts of conferences and associations of teachers, such as study clubs, teachers' institutes, district and subdistrict conventions, and faculty meetings, to enlist a principal's attention. No progressive principal will fail to be a member of these groups and to take an active part in as many of them as possible without allowing his school work to suffer.

A principal has numerous opportunities for business contacts through the local commercial club and the chamber of commerce. In addition, there are various other groups of business men, such as

community clubs, business men's clubs, and civic clubs, in which a principal should be interested. Of course, he cannot belong to all of them. Yet he should select the one which is most active in the community in which he is working and the one which represents the greatest number of the leading business men in order that he may keep in touch with the business life of the community. In this way he will find it possible to enlist the co-operation of the leading citizens of the community in the work of the school.

A principal has as many opportunities for social contacts in a community as has any other professional man. However, he must use discretion and sound judgment in selecting the social groups with which he identifies himself. He should take an active part in only those organizations which are of real benefit to him as well as of genuine pleasure. Aside from the church, with which every principal should be affiliated, one of the leading fraternal orders is probably the most important. Other than these, the best known organizations are the Rotary Club and the Kiwanis Club. However, the demands of the particular community will determine in a large measure the relative value to be placed on social contacts. No principal can afford to identify himself with groups outside of school which will hinder him in any way in his attempt to render the highest grade of professional service possible.

A principal has ample opportunity for maintaining his own physical fitness. He may set aside certain evenings during the week for his own pleasure. He has Saturdays for catching up in some of his work and also for such recreation as he may desire. Furthermore, he often has a short autumn and spring recess, usually a vacation of from one to three weeks during the Christmas holidays, and commonly a long vacation during the summer, all of which may be used for relaxation, a change of work, and recreational purposes. Or, if the principal is under contract for the twelve months of the year, he has the privilege of planning the work of the summer in such a way as to permit of generous recreational diversions.

Finally, a principal actually has opportunities for advancement to positions paying as high as \$8,000 a year. He is able to supplement his salary by wise investment of his savings. Furthermore,

there is ever present the opportunity to realize additional income from professional writings, lecturing, evening-school work, and similar activities. Hence we find that a principalship offers a great variety of profitable contacts.

THE TYPES OF MEN BEST FITTED FOR PROFESSIONAL  
CAREERS AS HIGH-SCHOOL PRINCIPALS

While it is true that there are only a limited number of attractive positions in principalships, it is likewise true that there are only a limited number of men who are uniquely qualified for the work. A young man of only average native ability can hardly hope to meet the present-day demands in such a field of leadership. However, it is often true that young men of this type, who have a dominant desire to render the very best service of which they are capable, will find it possible to render useful and happy service in a smaller community.

The real opportunities are open only to those men who possess exceptional and superior abilities. There has always been a demand for such men, and it is altogether probable that this demand will continue. Men of this type may expect to advance rather rapidly to positions paying from \$6,000 to \$8,000, provided they have a strong personality, a thorough professional preparation, and a genuine interest in the work, and provided they continue to grow in service. In connection with this work, they may expect to become influential leaders and to render unlimited service to the community. However, it should be noted that there are only a few of the important positions, and, as a result, some principals of distinct ability will have to be content with positions below the very top.

In addition to the native abilities mentioned, young men who hope to make rapid and substantial advances must possess certain well-defined personal qualifications. Among these qualifications, administrative ability and professional leadership are clearly the most important. A good executive must possess such abilities as will enable him to secure school, interschool, and community co-operation. He must have a keen sense of justice, tact, a sense of humor, industry, initiative, and sincerity. He must also have



sufficient self-confidence to insure success in putting his program into effect.

One of the principals who replied to the questionnaire enumerated the following qualifications of a successful principal: "Kindness, fairness, even temper, generosity, ability 'to take' a lot of things, democratic spirit, aggressive leadership, vision, courage, stability, fearlessness, a genuine wish to serve, and a genuine wish to give others a share in doing the big things about a high school." No one will deny that it is highly desirable for a principal to possess as many of the foregoing qualities as possible. Yet it is equally safe to assert that no one can expect one principal to possess all of these qualities. However, this principal emphasized very clearly the fact that "just any man" cannot expect to drift into the teaching profession and to become a successful principal within a few years. The job calls for the highest type of man—one who is willing to put his whole life and soul into his work. Unless he has distinct ability and is actuated by a dominant idea of *service*, he should never expect to make more than a mediocre success.

Considering the present demands which are made on the high-school principals, it is imperative that each man, no matter how capable, have a period of specific professional training. He should have at least four years of college work in which English composition, American government, psychology, United States history, social problems, economics, modern history, and ethics are given special attention. In addition, he should have one year of graduate work in which courses dealing with the practical side of education and courses in psychology are the major subjects. Principalships will never be classed among the leading professions until such professional schooling is required for entrance. It is very encouraging, however, to find that the typical high-school principal has the same opinion. Accordingly, he is striving as rapidly as possible to qualify as a genuinely professional man.

If a young man knows that he possesses the necessary qualifications and is interested in becoming a high-school principal, he should commence his professional training at the most opportune time. He should not begin it until after the first year in college or, better yet, not until after the second year in college. His background

is insufficient before that time. What he needs before specializing is a basic foundation and a broad culture. However, if he must teach before completing his college work, he should take some professional courses during the year prior to his experience in the field. Otherwise, the third year of the course is early enough if a man has definitely decided on his work and expects to begin his teaching the year following his graduation from college. The graduate work of a professional character may well be postponed until after a few years of teaching experience, for then a man is more intelligent concerning his profession and more vitally interested in his work.

A very natural and common question is, "How long will it take to reach a high level of efficiency in this work?" The answer is a simple one, "It depends entirely on the man." However, no man can hope to achieve much success in a principalship within a shorter period of time than five years. It will more likely take ten years for those other than the very brightest to reach a high level of efficiency in such work. The period of time depends largely on the nature of one's experience and training. The more varied the experience and the more thorough the training, the less time it will take.

## ERRORS MADE BY HIGH-SCHOOL STUDENTS IN ONE TYPE OF TEXTBOOK STUDY

WALTER S. MONROE AND DORA KEEN MOHLMAN  
University of Illinois

The study errors reported in this article are taken from the responses by high-school students to an experimental test which required the study of a short text for the purpose of answering from memory certain questions based on it. The test was arranged so that the text to be studied appeared on a right-hand page of the test folder; after the students had completed their study of it, they turned to the next page to answer the questions appearing there. Thus they did not see the questions until after they had completed the study of the text, and they were not able to refer to the text in answering the questions. The directions to the students were as follows:

You are to study these paragraphs so that you will be able to answer from memory questions based on them. The answers must be based on the paragraphs given there, not on any information which you may have gained from other sources. Whenever possible, answer in the words of the text. If this is not possible, use your own words. You will be allowed a certain length of time to study the paragraphs of each exercise. Study them carefully, and when the signal is given you are to stop. Then you will be asked to turn the page and write from memory the answers to the questions.

This test was given to several hundred high-school students. The present report is based on one hundred papers selected at random from those written by first-year high-school students near the close of the school year. The test consists of six exercises, each having a text to be studied, followed by two or more questions to be answered from memory. Space does not permit a description of the errors found in the answers to all of the questions. A few questions which in the judgment of the writers are most typical and most suggestive have been selected.

The first exercise called for the study of the following text:<sup>1</sup> A time limit of two and one-half minutes was allowed. Since this

<sup>1</sup> The two sentences italicized were not italicized in the test. They are printed in italics here because they contain the answers to two questions that are considered on the following pages.

text contains approximately 225 words, the students had an opportunity to do more than read it once hastily. The normal reading rate of such students for simple material of this type probably is in the neighborhood of 250 or 300 words per minute. It is very likely that they had sufficient time to study these two paragraphs in much the way in which they are accustomed to study their regular assignments of similar material.

# EXERCISE I

A short passage, and an ascent of seven steps, each of which was composed of a solid beam of oak, led him to the apartment of Lady Rowena, the rude magnificence of which corresponded to the respect which was paid to her by the lord of the mansion. *The walls were covered with embroidered hangings, on which different-coloured silks, interwoven with gold and silver threads, had been employed with all the art of which the age was capable, to represent the sports of hunting and hawking.* The bed was adorned with the same rich tapestry, and surrounded with curtains dyed with purple. The seats had also their stained covering, and one, which was higher than the rest, was accommodated with a footstool of ivory, curiously carved.

No fewer than four silver candelabras, holding great waxen torches, served to illuminate this apartment. *The walls of the apartment were so ill finished and so full of crevices that the rich hangings shook in the night blast, and, in despite of a sort of screen intended to protect them from the wind, the flame of the torches streamed sideways into the air, like the unfurled pennon of a chieftain.*

The second question of the first exercise was, "Describe the coverings of the walls." The answer to this question is contained in the first italicized passage of the text. This sentence includes a number of rather distinct ideas. In scoring the test papers it was divided into five ideas as follows: (1) The walls were covered with (embroidered) hangings; (2) these hangings had been embroidered with different-coloured or many-coloured silks; (3) they had been embroidered with gold and silver threads; (4) this embroidery had been done with the highest and most artistic workmanship possible during that age; (5) the designs of the embroidery represented scenes of hunting and hawking. Four types of major errors will be considered.

1. *Omission of whole ideas.*—The most prominent error was the total omission of one or more of the five ideas included in the text. There were only two papers out of the one hundred in which the

students gave evidence of a definite attempt to give all five ideas. The omission of ideas was frequently accompanied by other errors. Thirty-one papers, however, contained answers which were faulty in only this respect. The following are typical answers in which one or more of the ideas are omitted: "Draped in tapestry with threads of gold and silver intermingled." "They were of rich tapestry, designed with all the art that the age was capable of to represent the sports of hunting and hawking." "The walls were covered with rich tapestry with gold and silver woven in." "The wall had embroidered hangings on it."

2. *Error in relationship or confused ideas.*—Another typical error may be described as an "error in relationship" or "confused ideas." In these cases incorrect connections were made between certain elements of the sentence which gives the answer. For the most part, these faulty connections are due to wrong verb relationships. A possible explanation is that the student remembered certain of the more concrete or materialistic elements without getting a clear picture of these elements in their proper relation. Another way of stating the same thing is to say that the nouns were remembered better than the verbs. The outstanding example of this type of error was found in the answers where the coverings of the walls were said to be made wholly or partially of silk or to be hung with silk threads. The relation between the element "silk" and the other items of the answer is expressed somewhat obscurely in the text, and probably it was not clearly comprehended by many of the students. It is possible that these students were influenced in making their answers by their experience with hangings which are made of silk or hung with silk threads, with the result that the element "silk" was related incorrectly to the other elements of the answer.

Examples of this error are found in the following answers:<sup>1</sup> "The coverings of the wall *were adorned with many colored silks fastened on* with silver and gold threads." "They were *different colored silks* to which all the skill in weaving of that time had been applied to represent hunting and hawking." "The walls were adorned with beautiful tapestry *and silks* in which were woven

<sup>1</sup> Certain words and phrases have been italicized to point out the portion of the answer containing the error under discussion.

pictures of hunting scenes." "The coverings were of beautiful tapestry, *hung with silks*, which were embroidered with gold showing the sports of those days." "They were *hanging with silk thread* of all coloring."

3. *Other portions of the text predominant.*—In some of the answers elements from portions of the text other than that containing the answer replaced the correct answer or a part of the correct answer. The most common error of this type consists in describing the covering of the walls as curtains, or as purple in color, or in many cases as purple curtains. As a result of their everyday experience, the students probably thought of the hangings as curtains, and in this way the association with "purple curtains" led to the substitution. The elements of other portions of the text which became predominant in this fashion range in size from words to phrases and clauses. The following answers illustrate this type of error: "The coverings of the walls *were curtains* made of gold and silver threads making designs of hawking and hunting." "*Purple curtains* and silver and gold threaded tapestries." "*Purple curtains*, gold and silver tapestry." "Rich hangings *dyed purple* adorned the cracked walls." "*There were rich silk curtains and chair covered with costly material, one chair had an ivory footstool.*"

4. *Errors due to the introduction of extraneous ideas.*—In a few answers certain words, phrases, and sometimes clauses were introduced which were not contained in any portion of the text. In a majority of cases the ideas expressed by these words or phrases were not sufficiently in agreement with the text to be counted as correct. In several cases it is evident that the ideas substituted were suggested by certain portions of the text, but in others the relation is not close. It is likely that the students giving such answers did so because the ideas came into the focus of their consciousness at the time of writing and they failed to "verify" their answers. It may be that some incorporated the ideas in the meaning they gained from the study of the text. The following are typical of this error: "Rich tapestry and *golden ornaments.*" "The coverings on the walls were rich *rugs* interwoven with gold and silver which represented the hunt and hawking game." "The walls were covered with rich tapestries and drapes of gold and *crimson color.*"

Questions in which the student is asked "to describe" are very frequently asked by teachers. If we may consider the responses of these one hundred first-year high-school students as typical, the outstanding difficulty which students encounter in responding to such a question is the enumeration of all of the items or ideas that should be included in the answer. In most cases this difficulty is probably due to faulty technique in studying. The students failed to analyze the description for the purpose of determining the important ideas. If they had explicitly picked out the separate ideas which are essential to a description of the coverings of the walls, it is likely that a much larger percentage would have answered the question correctly. The three other types of errors are likewise indicative of faulty technique of study. It is likely that many of the students making these errors failed to study the text so as fully to comprehend it. Those making answers which included ideas suggested by other portions of the text probably had only very vague ideas out of which to construct an answer.

Another question asked in this test was "What color were the curtains which surrounded the bed?" The answer to this question is "purple." This is explicitly stated in the text, and correct answers were given by slightly more than two-thirds of the students. Most of the errors appear to be due to one of two causes.

1. *Other portions of the text predominant.*—In a number of cases ideas from other portions of the text were given. The most common substitutions were the words "silver" and "gold," used singly or together. Closely allied with this type of error is one in which "purple" was given together with ideas from other portions of the text that tended to render the meaning of the entire statement incorrect. The following answers are of this type: "The curtains were purple with gold and silver." "The colors were gold and silvery stripes in purple curtains."

2. *Guesses.*—A small number of answers appeared to represent guesses on the part of the pupils, although it is possible that in a few cases the answer may have been suggested by the text. "Quiet colors." "White." "Blue." "Lavender." "Bright colors with golden designs." "A rich gold with silver strands woven."

A third question of this exercise was stated as follows: "Why did the flame of the torches stream sideways into the air?" The



second italicized passage in the text reproduced on page 37 contains the answer. The two principal reasons are: (1) the crevices in the rudely constructed walls allowed the wind to come in, and (2) the wind blew the torches. A third idea is contained in the phrase "despite of a sort of screen intended to protect them from the wind." This idea does not represent a cause. It merely serves to make more emphatic the nature of the structure of the walls and the strength of the wind. For this reason its inclusion in, or omission from, the answer does not affect the correctness of a student's answer. Approximately one-half of the papers were correct, which shows that the question was not inappropriate for first-year students. The most common error was the total omission of one of the two reasons. As in the case of the preceding questions, there was evidence in a few answers that other portions of the text were predominant in the student's mind. In a few cases the answers appear to be guesses or to have been suggested by the students' general experience. This error is illustrated by the following answers: "The breeze *from the window* blew them." "Because *of the windows that were open* drew it into the air." "*The wind guards were not straight.*" "*Because there wasn't anything over them.*" "*Because they gave a wonderful light.*"

In the second exercise the pupils were asked to study the following text. They were allowed ninety seconds to do this.

#### EXERCISE 2

The monks and priests were the best educated men of the middle ages. They established schools at the monasteries. Many of these schools later became the famous universities of Europe. Printing was unknown in medieval times and the monks preserved and multiplied books by copying them by hand. Had they not done this no doubt most of the writings of the great Latin and Greek authors would have been lost to us. Some of the monks were very skillful in doing this work. They lined their sheets of parchment very carefully with a straight edge and an awl before they began to write. The letters of the copy were printed with great care.

After the students had completed their study they were asked to answer the following question: "Name the two contributions rendered to modern civilization by the monks and priests."

This question requires interpretation both of the question itself and the text studied. "Modern civilization" is not mentioned in

the text. Neither is the word "contributions." However, the two things which the monks and priests did are clearly indicated in the text. These are: (1) "they established schools," and (2) they preserved ancient or Greek and Latin books. Both of these statements can very properly be enlarged to include subordinate or explanatory ideas. Three types of errors appear to be significant.

1. *Omission of whole ideas.*—One of the most noticeable of the errors which occurred in the answers to this question is the omission of one of the two ideas. It was found chiefly in connection with other errors. In eleven of the answers, however, this was the only error which appeared. Three of the answers omitted both ideas, while eight omitted only one idea. The following answers are examples of the omission of one idea. One can only speculate as to whether the students who gave these answers were conscious of the fact that they had named only one contribution. "The monks and priests copied the books by hand. If they hadn't we wouldn't have had Latin and Greek copies today." "They saved the Latin and Greek authors' works and multiplied them." "They preserved and copied the old manuscripts." "Copies of the writings of the Latins and Greeks."

2. *Incomplete ideas.*—Another very prominent error in the answers to this question is the omission of parts of the ideas, due to the failure of the student to complete his statement. In a majority of cases this was due to the omission of the verb element in the statement. Frequently noun elements were given with no qualifying verb. Sometimes one contribution would be given in a complete sentence, while the other contribution would be incomplete. These abbreviations may have been due to a faulty habit of giving answers which the teachers had allowed the students to adopt. On the other hand, they may have been due to an incomplete comprehension of the text. The following responses are typical of this error: "Schools and books." "Schools and the writings of the Romans and Greeks." "Latin and Greek." "Schools and Latin." "Universities and readings." "Education, readings of great Latin and Greek authors." "The writings of the Latin and Roman authors and the art of printing." "The writings of old Latin

and Greek authors and printing." "Latin and French." "The art of printing and schools." "Books and they started schools which are now some of the leading schools of Europe." "The two contributions rendered by the monks are the schools which they founded in the monasteries and the works of the Greeks and Romans." "Schools and the saving of the Latin and Greek books which were valuable for their old writings. They copied them very carefully." "Schools now the great universities of Europe. And they preserved the books of the Greek and Latin."

3. *Answers from other portions of the text.*—A few students gave answers taken from other portions of the text. The character of these responses indicate that the students failed to comprehend the question. A comparison of the answer with the question would reveal its inappropriateness if the question had been understood. The following answers illustrate this type of error: "All the volumes of the Greek authors would have been lost." "Best educated men in the Middle Ages. They were very skilful in writings."

Exercise 6 called for the study of the following text.

#### EXERCISE 6

Literature goes back to the beginning of civilization. As soon as men learned to talk and to live together in families and tribes, they began to make literature. They made songs to express their deep feelings, as those of love, of victory, or of worship. They told of their deeds in stories. They gathered sayings of wisdom and made laws which their wise men memorized. In thus expressing their own thoughts, feelings, and deeds, they were trying to reach the sympathies and emotions of their fellows.

The songs and stories and wise sayings that were remembered soon became a bond of union among those who knew and enjoyed them. They were passed down from one generation to another, and spread from one tribe to many. Whatever impressed men most and seemed to them the truest record of their experiences was most likely to be treasured. This is the way in which literature became the expression of what is best and most worthy to survive in life.

One question asked on this text was, "What three forms did early literature take?" The answer given to this question in the text is (1) songs, (2) stories, and (3) laws or wise sayings. Each of these three items may be elaborated by adding descriptive phrases, but the words used in the preceding sentence or their synonyms are essential. Only twenty-two of the one hundred

papers contained answers that could be considered correct. There were three significant types of errors.

1. *Omission of ideas.*—As in the answers discussed in the preceding pages, the most common error was the omission of one or more of the three items. There were nineteen papers in which this was the only type of error. The following answers are typical: "Songs told feelings, stories told experiences." "Songs, stories." "Songs." "(1) Songs. (2) Sayings by wise men." "(1) They made songs as those of love, etc. (2) They told of their deeds in stories." "Songs expressing deep feelings and laws."

2. *Other elements of the text predominant.*—In twenty-eight papers other portions of the text furnished either a part or all of the answer. The following are examples of these answers: "In songs of victory of love and worship, talk, families." "Thoughts, feelings, deeds." "Love, worship and victory." "Victory, love, feeling, deeds." "(1) That of laws for early men. (2) That of stories. (3) That of their deeds." "Love, deeds (by story), worship." "Love, victory and deep feeling and laws." "Worship, love, deeds."

3. *Incorrect descriptions.*—In a very few of the papers answers were given which were rendered incorrect by the fact that the descriptions given with the items were wrong. Two of these answers follow: "Stories of love, victory and worship." "Songs and stories of love, victory and worship."

*Conclusions and applications.*—The type of study called for in these exercises is one frequently required by teachers in regular school work. The students were asked to study a given text for the purpose of answering certain questions from memory at a later time. The questions asked are among the most frequent types of questions that are asked in school work. Hence, it is believed that the errors considered are typical of those which students make in regular school work which calls for this type of study.

The errors considered in this paper appear to be due primarily either to faulty methods of study, which result in the student failing to acquire the necessary information, or to faulty technique on the part of students in utilizing the information they possess for the purpose of answering the questions asked. It is likely that both of these causes helped to produce the errors, but it was gener-

ally not possible to determine from an analysis of the errors which was the dominating cause. However, two faults in the procedure of study and two in the technique of answering questions appear to be rather clearly indicated.

1. In studying descriptions in which several items or ideas occur many students fail to comprehend these ideas as distinct parts of the description. The result is that these students have a rather indefinite and frequently slightly erroneous picture of the object or scene described rather than a picture in which the ideas are very definite and distinct.<sup>1</sup> Consequently, when they are asked to give a description from memory, they seldom know when they have completed it and they are likely to include several ideas which are either partially or wholly erroneous. In order to correct this fault students should be trained to analyze descriptions for the purpose of determining which ideas are important. During the period of training they may be instructed to give definite formulations of these ideas and to number them 1, 2, 3, etc. In descriptions more elaborate than those found in this test there may be subordinate ideas. In such cases the need for an effective technique of study is even more urgent.

2. A number of the errors indicate that the student often lacks complete comprehension of the question asked or of the paragraph studied. He may have grasped the meaning of an assignment in a superficial way, and he may be able to answer questions which explicitly call for certain facts. He may "know this lesson" in the sense that he has a superficial acquaintance with it, and, provided he has a good command of language, he may be able to talk somewhat intelligently about it, but at the same time he may have failed to associate with the sentences and paragraphs studied their rich and full meaning. This is well illustrated by the exercise which required the reading of a paragraph relating to the activities of the monks and priests during the middle ages. One of the questions called for a statement of the two contributions made to civilization by the monks and priests. Several students failed to

<sup>1</sup> Failure to remember ideas comprehended while studying the text was doubtless a contributing cause in some cases, but since the questions were answered immediately after the text was studied the students had little opportunity to forget what they had learned.

interpret the things which these men did as being "contributions to civilization." This means that they failed to comprehend fully the passage studied. It is also evident that some students failed to comprehend the significance of the question asked.

In considering how to correct this defect in studying it is necessary to remember that the complete comprehension of a text involves mental processes of a high order. Detailed directions cannot be formulated for such study, for it cannot be carried on by some rule of thumb. One may suggest to the students that they formulate questions which the text will answer and that they organize and associate as far as possible the text studied with other assignments of the same course and with those in other courses. If unfamiliar words are encountered, meanings should be ascertained. The most important ideas should be picked out. In some instances they will find it helpful to prepare a topical outline in which the ideas are arranged to show their interrelations and relative importance. However, neither the instructor nor the students should expect that any set of fixed rules will always lead to the desired result. There will be need for students to exercise ingenuity in attacking many assignments.

3. From the standpoint of answering questions there is evidence that many students fail to be discriminative in their statements. In many of the answers ideas were frequently confused; statements were indefinite; and, in general, there was much evidence of carelessness on the part of the students making the errors. Most of these errors cannot be excused on the ground of poor English or of merely faulty expression. It is true that many grammatical errors were found, but these seldom, if ever, made the answers incorrect. It must be remembered that there is an intimate relation between one's language and the mental processes which culminate in the expression. Confused or careless statements are usually indicative of confused and careless thinking. The omission of verbs from answers which should consist of complete sentences is more than merely a grammatical error. It is evidence that the student did not have complete and clear ideas to express. The informality of the present-day classroom may be conducive to carelessness in language. The teacher frequently accepts incom-



plete statements because as they appear in the context of the recitation he is able to read into them a satisfactory meaning. As a result, students tend to acquire the habit of presenting merely a few phrases and clauses and expecting the teacher to do the rest. This practice is seriously at fault. In addition to allowing the students to cultivate wrong habits of expression, there is a failure on the part of the teacher to stimulate in them the right sort of study and the right sort of thinking in answering questions. The remedy is obvious. Students should be required to express complete ideas. In some situations grammatically incomplete sentences may be accepted, and this requirement will not necessarily destroy the desirable informality of the recitation period.

4. A number of errors are so obviously incorrect that it is only necessary to compare the answer with the question. In many cases it seems that the student himself should be able to detect an incorrect answer. If students after writing their answers were trained to verify them by comparing them with the questions, it is probable that the percentage of correct answers would be materially increased. It probably frequently happens that the student has sufficient information to answer the question correctly and would do so provided he were trained to make such a comparison of answer and question.

The outstanding application of this investigation is the need for training high-school students in the technique of study and in the technique of answering questions. We have already made a number of suggestions for this training. An investigation such as we have described in this report would prove very helpful to a teacher and stimulating to students. Their limitations would be made more evident, and an effective starting-point would be furnished for the needed training. The investigation would be illuminating to the teacher and would call to his attention many of the details in the training of students which he is probably now overlooking. It should, however, be remembered that there are several types of study. Similar investigations would undoubtedly reveal other weaknesses in the study procedures of students.

see also p. 9



## THE MANAGERIAL DUTIES OF THE PRINCIPAL

H. D. FILLERS

Superintendent of Schools, Corsicana, Texas

It is generally recognized that the greater part of the principal's time is taken up with clerical matters and duties relating to the general control of the school, while supervision, which is ranked as of first importance, receives in actual practice only a small fraction of the total day's time. This condition creates a real problem in high-school administration. The need for the leadership of the principal cannot be gainsaid; yet the general character of the work with which he busies himself interferes with his leadership and restricts his usefulness.

In order that the work of the principal may be seen in its true perspective, it is necessary to analyze his duties in specific detail. What are the duties that he performs or attempts to perform? Should he undertake to perform all at the risk of neglecting some? Should he conserve his time for the most important which he alone can do well and delegate to subordinates those that can be done equally well, if not better, by others?

It is the purpose of this paper to present a list of the customary managerial duties which engage the larger share of the principal's time and to offer a plan for delegating certain duties which will make possible the gaining of time by the principal for the performance of the neglected duties connected with the supervision of classroom instruction.

The managerial duties of a high-school principal may be classified as follows:

- A. Curricular
  - I. Clerical
  - II. General in control
  - III. Inspectorial and co-ordinating
- B. Extra-curricular
  - I. Clerical
  - II. General in control
  - III. Inspectorial and co-ordinating

Curricular duties include all of those functions that have to do with the management of a school in so far as the problems of classification, instruction, and discipline are concerned.

Extra-curricular duties are concerned with those modern adjuncts of a school called student activities. These include athletics, debating clubs, Hi-Y clubs, literary societies, school publications, school dances, and similar activities which give color to the life of the school and develop its spirit.

The following outline presents in detail the duties of the principal.

A. Curricular duties

I. Clerical

1. Keeping a record of school and of class attendance
2. Keeping a record of tardiness
3. Handing out re-admission slips
4. Making reports to parents of absences, tardiness, and pupils' work
5. Making statistical reports to the superintendent
6. Summarizing reports of teachers
7. Keeping accurately a permanent record of pupils' credits
8. Making requisitions for supplies
9. Reporting repairs needed
10. Caring for free textbooks and other equipment or supplies
11. Keeping a record of books or material loaned to pupils and teachers
12. Collecting tuition and other fees and sending to proper officer
13. Making and reporting pupil transfers
14. Distributing books and supplies through co-operation of teachers
15. Answering telephone calls
16. Keeping a record of the teachers (This will include their absences.)
17. Recording names of substitute teachers and exact dates taught
18. Making out college-entrance certificates
19. Tabulating tentative program cards of pupils

II. General in control

1. Interpreting the tabulation of tentative program cards
2. Classifying pupils
3. Holding group and individual conferences with pupils for the purpose of explaining schedule, course of study, and requirements
4. Scheduling each pupil's work
5. Arranging a daily schedule for the school
6. Checking daily schedule against the time distribution of individual pupils and teachers
7. Holding teacher conferences for the purpose of improving schedule and explaining the control of the school

8. Working out plans for handling problem cases in attendance, tardiness, instruction, and discipline
9. Co-operating with teachers in setting up standards in the school in discipline, instruction, and social life for the pupils
10. Working out effective plans for keeping the attendance and permanent records of the pupils
11. Arranging for class, hall, and yard control
12. Inspecting and directing the work of the janitors
13. Working out a plan for controlling the use of school telephones
14. Conferring with the superintendent regarding ideals and larger objectives of the school
15. Holding conferences with parents
16. Laying, with the advice and counsel of officers and teachers, plans for the constructive growth of the school
17. Outlining plans for revising the course of study and setting the teachers to work on the problem

### III. Inspectorial and co-ordinating

1. Inspecting the character of pupil accounting
2. Handling personally the problem cases arising therein
3. Checking the keeping of records and reports
4. Advising teachers on points that will improve classroom and study-hall discipline
5. Co-ordinating the marking done by the different teachers
6. Co-ordinating instruction in related departments of the school
7. Checking up the outcome in the problem cases assigned to teachers
8. Checking the clerical work and work in general control delegated to others
9. Developing right attitudes toward the school and its objectives in the minds of teachers and pupils

## B. Extra-curricular duties

### I. Clerical

1. Keeping an account of fees collected and payments made in each separate activity
2. Recording the credits due each pupil for participation
3. Making and filing a list of officers of each club or activity
4. Keeping a list of faculty advisers
5. Listing dates of regular meetings and adding dates of special meetings
6. Keeping on one calendar a list of the dates of the meetings of all organizations
7. Making a record of special plans and suggestions

### II. General in control

1. Holding conferences with each organization
2. Conferring with the officers of each organization

3. Conferring with students' council, if school has one
4. Appointing faculty advisers and holding conferences with them
5. Delegating specific duties to faculty advisers, to club officers through advisers, to organizations, and to school clerks
6. Suggesting the making of budgets for each activity
7. Approving budget for athletics, clubs, and all other activities
8. Approving any new policy or procedure before it is put into effect
9. Arranging assembly programs
10. Devising schemes for improving the work in the activities
11. Setting up ways and means of giving publicity to athletics, debating clubs, and other organizations
12. Developing plans for checking up the value of the work done in all of the extra-curricular activities of the school

### III. Inspectorial and co-ordinating

1. Checking actual expenditures of each activity against budget
2. Co-ordinating the programs of the different organizations
3. Checking all activities in the light of what they are really doing to promote the ends for which they exist
4. Keeping in close touch with the athletics, social life, and school publications
5. Seeing that publicity plans are put into effect
6. Determining the value of the activities to the school and to the pupils by weighing the outcome of the work
7. Holding all organizations in line with their proposed programs

In an investigation of the way principals in schools approved by the North Central Association of Colleges and Secondary Schools

TABLE I

Duties	Number of Minutes
1. Inspection of building.....	40
2. Supervision of instruction.....	40-60
3. Teaching.....	90
4. Study hall.....	40
5. Office routine.....	60
6. Teacher conferences.....	30
7. Pupil conferences.....	30
8. Conferences with callers.....	30
9. Student activities.....	30
10. Civic life.....	30

spend their time Davis found that the distribution shown in Table I represents the activities of the average principal on an average

day.<sup>1</sup> This distribution of time could be vastly improved by a close study of duties in detail and by a large delegation to clerks and teachers. Office routine and inspection of the building could be delegated in whole or at least in a large part. Even then little time would be left for supervision unless the principal increases the length of his day. It is suggested that the principal have an eight-hour day instead of the seven-hour day which Davis found to be common. These suggestions would operate in such a manner as to increase the time for classroom supervision from 40-60 minutes to 140-160 minutes. The difference ought to have a very wholesome effect.

TABLE II\*  
DISTRIBUTION OF CURRICULAR DUTIES

Delegated to Clerk	Delegated to Teachers	Performed Personally
I: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19	I: 14 II: 2 (in part), 8, 9, 11, 12, 15, 16, 17 (The working out of details under these headings should be delegated.) III: 5, 6, 9. (At least a part of this should be done by the teachers.)	II: 1, problem cases in 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 in part, 16, 17 III: 1, 2, 3, 4, 5 in part, 6 in part, 7, 8, 9 in part

\* The numbers in this table refer to the foregoing outline of curricular duties.

TABLE III\*  
DISTRIBUTION OF EXTRA-CURRICULAR DUTIES

Delegated to Clerk	Delegated to Teachers	Performed Personally
I: 1, 2, 3, 4, 5, 6, 7	I: To report to clerks and principal II: To perform duties implied in 4, 5, 7, 8, 9, 10, 11, 12 III: 1, 5, 6, 7. These should be performed in part; that is, so far as his particular activity is concerned	II: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 III: 1, 2, 3, 4, 5, 6, 7

\* The numbers in this table refer to the foregoing outline of extra-curricular duties.

<sup>1</sup> C. O. Davis, "The Duties of High-School Principals," *School Review*, XXIX (May, 1921), 344.

In Tables II and III an attempt is made to distribute and delegate certain specific duties and functions. An examination of Table II reveals the fact that most of the duties in the general control of the school actually to be performed by the principal will be finished by the end of the second week after the opening of any semester. The duties listed under III will, in the very nature of the case, be distributed over the entire year. These can be performed incidentally in a most satisfactory manner in the course of the day while discharging the larger and more valuable function of supervision.

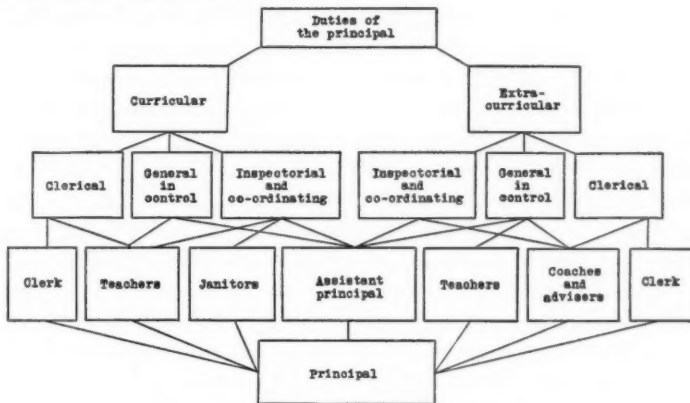


FIG. 1.—Distribution of the principal's duties

According to Table III, the extra-curricular duties actually performed by the principal are also greatly narrowed in scope so far as time is concerned. The duties mentioned under II can all be taken care of during the first three or four weeks of any school term. In the main, these duties should be performed at the end of the school day as soon as the curricular duties are disposed of. Certainly some of the machinery here contemplated could and should be set in motion before that time. The duties listed under III again are inspectorial. They take some time, probably thirty minutes or less each day on the average.

Figure I indicates the distribution and the co-ordination of the managerial work of the school.

## A STUDY IN ORGANIZATION OF FOOD AND CLOTHING COURSES IN HIGH-SCHOOL HOME ECONOMICS

LEONA F. BOWMAN  
University of Chicago

In the early part of 1919 an effort was made to prepare tentative tests which might later be standardized and used in determining the range of home economics subjects and the teaching emphasis in these subjects. The tests were based on and organized in accordance with the subject-matter common to the textbooks in textiles and clothing which were being used in 95 per cent of the high schools of the United States at that time.<sup>1</sup> These tests were given to approximately four hundred high-school students of home economics. The scoring of the tests gave evidence that in some high schools a very meager textile vocabulary was being developed; in others the microscopy of the fiber was completely omitted; in others very little emphasis was being placed on discriminating tests. Such differences led the writer to believe that a study of the organization of home economics courses must be made before the tests could be properly organized and standardized. With this conviction, the present study was undertaken with the following purposes in mind: (1) to determine the average amount of classroom work required in home economics in the high school for one unit of credit toward graduation; (2) to determine the different types of organization used in representative high schools; (3) to ascertain which type of organization is most valuable in developing ability in the student and in sustaining the student's interest in the work; and (4) to use the information gained as a basis for making criticisms of present-day procedure, for drawing conclusions which may be valuable to teachers and administrative officers, and for organizing tentative and standardized tests which will meet the requirements

<sup>1</sup> *Home Economics in American Schools*, Supplementary Educational Monographs, Vol. II, No. 6, p. 25. Chicago: Department of Education, University of Chicago, 1920.



of present-day organization of home economics in textiles and clothing.

Preliminary to a more thorough and intensive study of the organization of home economics in the high school, it was deemed advisable to examine as many state and city courses of study as were available. Through this analysis three distinct types of organization were revealed in schools in which two years or their equivalent are given to food and clothing courses. The year plan of organization is classed as Type 1. Type 2 is the semester plan. In Type 3 sewing and cooking are both offered in the Freshman year. Laboratory periods are arranged so that in the first semester three such periods are given to cooking and two to sewing while in the second semester three laboratory periods are given to sewing and two to cooking. Provision is made also for two recitations per week in each subject in addition to the laboratory periods. By such organization one unit in cooking and one in sewing, or the equivalent of two years' work in cooking and sewing may be completed in the Freshman year of the high school.

A mimeographed copy of the preliminary survey and the following questionnaire were sent to 323 representative school systems in different parts of the United States.

Name of high-school principal or city superintendent? City? State?

1. What constitutes a unit of work in home economics in your high school? Number of weeks? Number of periods per week? Length of periods in minutes?

2. How many units of work are offered?

- a) Cooking
- b) Sewing
- c) Housewifery
- d) Economics of home
- e) Textiles
- f) Household management
- g) Child care
- h) Costume design
- i) House planning
- j) Dietetics

3. Is some home economics training required of every girl? Kind of training? Number of units required?

4. Check below the type of organization which you are using in teaching cooking and sewing or describe type which you use.

Type	Number of Years	Content
1.....	2	1 year of cooking and 1 year of sewing or reverse order
2.....	2	First year: $\frac{1}{2}$ year of cooking and $\frac{1}{2}$ year of sewing or reverse order Second year: $\frac{1}{2}$ year of cooking and $\frac{1}{2}$ year of sewing or reverse order
3.....	Equivalent of 2 years taught first year	2 recitation periods in each subject with 3 laboratory periods of cooking and 2 laboratory periods of sewing per week for the first semester 2 recitation periods in each subject with 3 laboratory periods of sewing and 2 laboratory periods of cooking each week for second semester

5. Check the organization which you personally prefer: Type 1, Type 2, Type 3, other type. In the following lists check reasons for your preference and add other reasons.

#### *Type 1*

1. Time for completing a series of projects necessary for developing good habits.
2. Cooking should precede sewing; requires less co-ordination of finer muscles.
3. A full year's course in food followed by a full year in sewing holds girls in school.

#### *Type 2*

1. Change in subject-matter each semester adds interest.
2. Better gradation of subject-matter; difficult problems of both sewing and cooking postponed to second year.
3. Gives opportunity for some training in both subjects to girls who drop out of high school after one year.
4. Some training in food and clothing when but one unit in home economics is accepted for college-entrance credit.

#### *Type 3*

1. Paralleling food and clothing courses give more intensive training in home economics in the Freshman year, which is desired.
2. Full-year training in both sewing and cooking, even if but one unit is accepted for college-entrance credit.
3. Greater opportunity for home economics training for girls who remain in high school only one year.

Returns were received from 208 school systems distributed through forty-three states. Of the 208 school systems reporting,

eleven are not offering home economics courses in high school. The remaining 197, however, compose a sufficiently large and representative group to justify the assumption that they furnish an adequate basis for a study of the organization of home economics in high schools.

The tabulated returns from the first question (What constitutes a unit of work in home economics?) are illuminating because of the variety in time combinations and the wide range in the amount of time required in classroom and laboratory for one unit of work. In the semester or eighteen-week period there are twelve combinations, ranging from one period of forty-five minutes per week to ten periods of fifty minutes each or five double periods per week. In the nineteen-week semester, there are four combinations; in the twenty-week semester, seventeen; and in the forty-week or year plan, there are nineteen combinations with a range of from two forty-minute periods per week to ten sixty-minute periods per week.

TABLE I  
REPRESENTATIVE TIME ORGANIZATION OF HOME ECONOMICS COURSES  
IN 197 SCHOOL SYSTEMS IN THE UNITED STATES

Number of Weeks	Number of Periods Per Week	Length of Periods in Minutes	Total Number of Minutes	Number of Fifty-Minute Periods
36.....	2	40	2,880	57.6
36.....	2	45	3,240	64.8
36.....	2	90	6,480	129.6
36.....	3	84	9,072	181.4
36.....	5	40	7,200	144.0
36.....	5	45	8,100	162.0
36.....	5	60	10,800	216.0
36.....	5	65	11,700	234.0
36.....	5	70	12,600	252.0
36.....	6	45	9,720	194.4
36.....	7	40	10,080	201.6
36.....	7	60	15,120	302.4
36.....	9	45	14,580	291.6
36.....	10	40	14,400	288.0
36.....	10	45	16,200	324.0
36.....	10	50	18,000	360.0
36.....	10	90	32,400	648.0

Table I which illustrates the combinations in the year plan of thirty-six weeks is representative. This table shows seventeen combinations with a range of from two forty-minute periods to

ten ninety-minute periods per week. Two questions naturally arise: Why should there be such variation? What effect does such variation have on teaching the subjects?

It is generally recognized that the class period for home economics must conform to the class period for other subjects in the curriculum.

From an intensive study of the replies to the questionnaires it appears that in the eastern and southern states the variations are the greatest. This is presumably due to the fact that the eastern universities and women's colleges are more rigid in their entrance requirements. Until recently many of the eastern schools did not accept credits in home economics for college entrance. In the central, western, and southern states one, sometimes two, and in rare cases four credits are accepted for such training. It seems that in planning programs for the high-school courses home economics in many cases receives the time allotment which is left after history, mathematics, languages, science, and the other subjects have been given due consideration. In many school systems in the South home economics courses have not been effectively organized.

Table I also indicates that no standard course of procedure and no standard course of study could be devised to meet the time variables indicated and that every teacher in home economics, before entering a new position and before organizing her course and planning her projects, should have a definite understanding of the amount of time and the distribution of such time provided for her subjects in the school program. She should also know whether or not home project work is required and the amount of credit which is given for such work.

Table II shows the number of school systems which are requiring the same or comparable amounts of classroom work in home economics for one unit of credit. This table leads to the following conclusions: (1) the minimum amount of time required for one unit of credit toward graduation is seventeen hours of classroom work, while the maximum for the same credit is 684 hours; (2) the median is between 220 and 240 hours or, to be exact, 226 hours; and (3) the average amount of time required for one unit

of credit in representative high schools is 236.7 hours. The wide range of hours, from 17 to 684, for which equal credit is given, may be accounted for by the fact that in some schools home project work, for which credit is also given, is carried on in connection with classroom requirements. Such procedure would give an opportunity to reduce the time in the classroom to the minimum. But

TABLE II  
SCHOOLS REQUIRING COMPARABLE UNITS OF TIME FOR  
ONE CREDIT IN HOME ECONOMICS

Number of Schools	Total Number of Minutes	Number of Fifty- Minute Periods*
1.....	850	17
6.....	1,000-1,999	20-39.9
2.....	2,000-2,999	40-59.9
5.....	3,000-3,999	60-79.9
13.....	4,000-4,999	80-99.9
6.....	5,000-5,999	100-119.9
7.....	6,000-6,999	120-139.9
16.....	7,000-7,999	140-159.9
22.....	8,000-8,999	160-179.9
14.....	9,000-9,999	180-199.9
5.....	10,000-10,999	200-219.9
4.....	11,000-11,999	220-239.9
11.....	12,000-12,999	240-259.9
5.....	13,000-13,999	260-279.9
15.....	14,000-14,999	280-299.9
2.....	15,000-15,999	300-319.9
26.....	16,000-16,999	320-339.9
11.....	17,000-17,999	340-359.9
16.....	18,000-18,999	360-379.9
1.....	19,000-19,999	380-399.9
0.....	20,000-23,999	400-479.9
2.....	24,000-24,999	480-499.9
1.....	25,000-25,999	500-519.9
0.....	26,000-31,999	520-639.9
5.....	32,000-32,999	640-659.9
1.....	34,200	684

\* The fifty-minute period is used as the basis for comparison.

even so, it is doubtful whether one unit of credit can be justified for seventeen or thirty-six or even sixty-four fifty-minute periods of classroom work. On the other hand, the requirement of 684 hours of classroom work for one unit of credit seems excessive. Reduced to hours per week in a school year of forty weeks, this means that more than sixteen fifty-minute hours per week are required.

However, we find by again referring to Table II that the two extremes are represented by but one school in each case. The average amount of time required for one unit of credit is 236.7 hours. This approximates three eighty-minute laboratory periods and two forty-minute recitation periods per week for thirty-six weeks.

From the data in Table I it is evident that the forty-minute class period is a fairly common time unit in high-school programs. The tendency, however, is toward a longer period. It is the opinion of the writer that the average amount of class instruction in high-school home economics laboratory courses should occupy three ninety-minute laboratory periods and two forty-five-minute recitation periods or equivalent time per week. Such an organization should cover at least thirty-six weeks of work if one unit toward graduation is granted and if no home project work is included.

In Table III the schools under consideration have been grouped into class intervals of 5,000 minutes equivalent to one hundred

TABLE III  
SCHOOLS GROUPED IN INTERVALS OF 5,000 MINUTES  
EQUIVALENT TO ONE HUNDRED FIFTY-MINUTE  
PERIODS

Number of Schools	Class Intervals of 5,000 Minutes	Class Intervals of One Hundred Fifty- Minute Periods
27.....	0- 4,999	0- 99.9
65.....	5,000- 9,999	100-199.9
40.....	10,000-14,999	200-299.9
56.....	15,000-19,999	300-399.9
2.....	20,000-24,999	400-499.9
1.....	25,000-29,999	500-599.9
6.....	30,000-34,999	600-699.9

fifty-minute periods. This table shows that twenty-seven of the schools reporting are giving one unit of credit for less than 100 hours of classroom work and that nine schools are requiring more than 400 fifty-minute periods of classroom work for one credit. The table also indicates the mode or largest group of schools, sixty-five in number. These schools require between 100 and 200 hours of classroom work for one unit of credit, while an almost equally large

group of schools, fifty-six, require between 300 and 400 hours of classroom work for the same amount of credit. These considerations indicate that careful thought must be given on the part of administrative officers to the amount of time allowed for teaching home economics courses and to the amount of credit granted for regular classroom work.

As previously stated, three types of organization of home economics courses were revealed. The tabulated returns of the questionnaire show that 35 per cent of the high schools reporting are using Type 1 or the year plan for teaching food and clothing; a fraction more than 28 per cent of the schools reporting are using the semester plan which is designated in the questionnaire as Type 2; more than 9 per cent are paralleling courses in food and clothing, using the year plan designated as Type 3. Fifty-four or a fraction less than 28 per cent of the schools are using other types of organization. These have been grouped and will be referred to as Types 4, 5, 6, and 7.

Type 4 appears in fourteen schools which offer two periods per week of sewing, two periods per week of cooking, and one period per week of home-making or some similar subject, or one or two periods per week for recitation in sewing and cooking.

Another group of schools, having Type 5, provides for three laboratory periods per week in cooking and two laboratory periods per week in sewing the first year. The time is reversed for the two subjects during the second year, cooking receiving two and sewing three laboratory periods.

The two-period-per-week plan or Type 6 is illustrated by the following organizations: (1) cooking and sewing, one eighty-four-minute period of each per week in all four years of high school; (2) cooking and sewing in Freshman year, one ninety-five-minute period of each per week; (3) cooking for two years, one 120-minute period per week; sewing, one 120-minute period per week for four years.

Less than 3 per cent of the schools reporting are using the one-period-per-week plan for each home economics subject. With high-school students the loss of interest in a clothing project is very great when the problem is taken up but once each week, and



when only eighty-four or ninety-five minutes are given to the problem in hand. If but 120 minutes per week can be given to a home economics subject, one continuous period of 120 minutes is undoubtedly better than three separate forty-minute periods, because of the conservation of time in handling materials; then, too, the period is long enough to accomplish definite results if the problems are carefully planned, and it is easier to schedule if the four-period-per-week plan is used in other subjects.

The form of organization designated Type 7 may be described as the rapidly alternating plan. In two schools the semester is broken into two parts. Cooking is taught the first half of the semester and sewing the second half. Another school alternates the two subjects by weeks. In two other schools cooking and sewing are taught double periods on alternate days for four years. Another school offers two periods of cooking one week and three periods of sewing the next. Each alternate week the time given to the two subjects is reversed. Such rapid and intricate alternation of subjects must be confusing to instructors as well as to students. It is gratifying to note, therefore, that according to this study not more than 3 per cent of the high schools are using such rapid alternation of subjects.

TABLE IV  
NUMBER AND PERCENTAGE OF TEACHERS  
INDICATING PREFERENCE FOR VARIOUS  
TYPES OF ORGANIZATION

Type of Organization	Number of Teachers	Percentage
1.....	48	29.8
2.....	69	42.9
3.....	21	13.0
4.....	12	7.5
5.....	6	3.7
6.....	3	1.9
7.....	2	1.2
Total.....	161	100.0

According to the tabulated returns of Question 5 (check the type of organization which you personally prefer), the majority of teachers prefer the semester plan. Table IV indicates that

of 161 teachers, sixty-nine or 42.8 per cent prefer Type 2, the semester plan; forty-eight or 29.8 per cent prefer Type 1, the year plan, in which sewing and cooking are not required of the same pupil at the same time; twenty-one or 13 per cent prefer Type 3, the year plan, in which the food and clothing courses are paralleled and may be taken simultaneously by students. The remaining twenty-three or 14.3 per cent prefer types other than those suggested in the questionnaire. Table IV seems to indicate also that more than 70 per cent of the teachers favor a plan by which concentrated effort may be given to one branch of home economics rather than effort distributed among several branches.

It is the belief of thirty-five teachers that a change in home economics subjects each semester has a tendency to increase interest in home economics in general. Forty-nine of the teachers believe that the semester plan permits of better gradation of subject-matter, since the more difficult problems of both sewing and cooking can be postponed to the Sophomore year when the girls will have had more training in related subjects which makes for a better background and a fuller understanding of basic principles.

Fifty-six teachers prefer the semester plan because this organization gives opportunity for some training in both food and clothing to girls who remain in high school but one year.

Forty teachers believe that an opportunity for some training in both food and clothing should be offered girls who expect to go to college. Such opportunity is provided by the semester plan when but one unit in home economics is accepted for college entrance credit.

Other arguments favoring the semester plan are as follows:

One-half unit completed each semester makes it possible for change second semester. Students entering late or mid-term can be provided for more easily than by the year plan.

Semester alternation of food and clothing with the necessary review seems to give students a more thorough understanding of home economics principles.

Semester plan gives training in both subjects to the maximum number of girls each year. All girls need a knowledge of both subjects and, when permitted to elect, seldom choose both.

The majority of the criticisms were directed by the teachers against those types of organization in which there is paralleling or rapid alternation of food and clothing courses. The following quotations are representative:

Frequent changes in the same term or semester from food to clothing tend toward loss of interest.

Students lose the point of successive lessons by rapidly alternating food and clothing subjects or by offering the subject for a limited number of times per week.

Related subjects are more easily correlated when sewing and cooking are not paralleled by students in the same semester or year. To illustrate: Related art work and elementary science may function in actually carrying out clothing problems; similarly, foundational work in general science and physiology may precede a study of food, and related biology parallel it, thus giving a better background for a more thorough understanding of food principles.

Such comments seem to indicate a growing conviction that some day home economics may become one of the great applied sciences of the curriculum. They also point out the need for concentrated effort along one line for a rather continuous period for the purpose of developing fundamental principles and of maintaining the maximum of interest in the subject.

#### SUMMARY OF FINDINGS

The minimum amount of classroom time required for one unit of credit toward graduation is seventeen fifty-minute periods. The maximum is 684 fifty-minute periods; and the average for the 197 high-school systems studied is 236.7 fifty-minute periods.

Seven types of organization are being used in high schools. According to this study, 35 per cent of the high schools are using Type 1 or the yearly alternation of food and clothing courses. Twenty-eight per cent of the schools are using the semester plan or Type 2. Type 3 parallels food and clothing courses, giving two laboratory periods to sewing and three to cooking the first year and then reversing the time for the two subjects the second year. In addition, two recitation periods per week are provided for. This organization is being used by approximately 10 per cent of the schools.

Practically 7 per cent of the schools are using a fourth type of organization in which two laboratory periods per week are given to food, two to clothing, and one to recitation or some related subject. Other schools are using the two-period-per-week plan. The range is from 84- to 120-minute periods. Each of the two subjects, food and clothing, is scheduled but once each week. A few schools are alternating the teaching of food and clothing every week, every six weeks, every nine weeks, or every ten weeks. Others alternate every two days, and still others alternate every day.

Although sixty-nine, or 35 per cent, of the high schools are using Type 1, which is the year plan, for teaching food and clothing, 42 per cent of the teachers prefer the semester plan, while only 29 per cent prefer the year plan. Thirty-five of the 161 teachers offering reasons for preference believe that additional interest is secured by alternating food and clothing each semester.

In approximately 81.7 per cent of the schools home economics is elective while in 36, or less than 19 per cent, it is a required subject. Of this small number of schools the majority require only one unit of credit in home economics, leaving it to the election of the student as to whether the entire requirement shall be met in food or in clothing or part in each.

A wide range of home economics subjects has been organized in high schools offering a four-year course in home economics. These are: sewing; textiles; house management; costume design; house planning; millinery; related art; laundry; remodeling, dyeing, and dry cleaning; tailoring; household accounting; economics of the home; cooking; housewifery; child care; dietetics; hygiene and home nursing; invalid care and feeding; advanced cooking and table service; lunch cooking; bacteriology; sanitation; cafeteria supervision; household physics. No one high school considered here offers all of these courses. In some of the larger high schools many of the subjects mentioned are taught as separate divisions of home economics, but in the majority of the high schools the different subjects are grouped under general headings. To illustrate: textiles as such is taught in sixteen of the 197 high schools reporting. In the remaining schools, textiles is taught in connection with sewing. Similarly, home management or dietetics or child

care, or all three, may be taught in connection with a study of food and be classed as "cooking."

Such grouping of subjects (as textiles in connection with sewing) and the wide range in time given to home economics subjects, as set forth in this study, in a measure account for the variation in teaching emphasis discovered through the use of tests. Because of such findings it is evident that home economics tests, both tentative and standardized, must be so organized that each test will cover but a small division of one subject rather than the whole subject.

#### CONCLUSIONS

The present investigation points out that no standard course of study in home economics could be devised which would be suited to all of the time combinations presented in Table I. It follows that teachers, before planning their courses and projects, must have an understanding both of community needs and of the amount of time and the distribution of such time provided for their subjects.

The wide range in the amount of classroom work required for one unit of credit toward graduation seems to argue for greater uniformity and for more careful thought on the part of administrative officers and home economics people in general. The average, 236.7 fifty-minute periods, or two single recitation periods and three double laboratory periods per week for thirty-six weeks, closely approximates a reasonable requirement for one unit of credit.

The organization classed as Type 2, the semester plan, is well suited to high schools providing a large or small home economics teaching staff. However, the year plan is very desirable if the teaching staff is large enough to offer beginning courses at the time of mid-year promotions.

The teachers' preference for the year and the semester plans of organization leads one to conclude that the best results in teaching are secured by sustained periods of concentrated effort on one phase at a time of home economics and its related subjects.

The time organization and the subject-matter organization have been found to be such that home economics tests must be so divided that each group will cover but a small unit of subject-matter if the tests are to be effectively used in home economics teaching.

## Educational Writings

### REVIEWS AND BOOK NOTES

*Training for business.*—"To determine the general objectives of business education, to indicate the important agencies concerned, and to suggest the place of each" is the author's statement of the purpose of a recent book.<sup>1</sup> "It is not a discussion of the curriculum of a *particular* type of school," he continues, "but an approach and point of departure for a study of the curriculum of *any* type of business course" (p. ix). After rejecting the traditional methods of curriculum-making as futile, he proceeds "to apply a new point of view to the study of education for business and to the formulation of curricula for that purpose," with "some special emphasis on commercial education in secondary schools" (p. 25).

Objectives of business education are found by the author in the function of business in organized society and in the immediate and ultimate vocational needs of workers in commercial occupations. He has made a study of business operations, of its highly specialized processes and complex organization, of the applications of science to production and management, and of the service which business performs as an agency of social and individual welfare. Every business activity has its technique, and every worker in whatever capacity must be skilled in the performance of his specialized task. Skill in the performance of one operation gives no understanding of the broader phases of concerted operations. Experience, therefore, in the modern business establishment develops routine operatives; it teaches almost nothing of business relationships, procedure, or management.

Commercial and industrial affairs are conducted on so large a scale that the neophyte has little chance to learn broadly either by observation or by experience. He is put at a single task. The more expert he becomes, the more likely it is that he will be kept at one task unless he has had a training in his youth which has fitted him to comprehend in some measure the relation of his task to those which others are doing [p. 104].

Work is becoming less than ever competent to educate the worker, and if we are to escape the torpor, frivolity, and social irresponsibility engendered by this condition, we must offset it by a social and moral culture acquired in the schools and in the community life [p. 226].

<sup>1</sup> LEVERETT S. LYON, *Education for Business*. Chicago: University of Chicago Press, 1922. Pp. xiv+618. \$3.50.

While the need of specialized training for specialized performance is recognized, surveys of business occupations and job analyses make it appear that a large percentage of employees are engaged in work to which their studies in school have little or no relation. Our commercial courses, therefore, have been wholly inadequate to meet the immediate vocational needs of pupils and have not provided for the ultimate demands of business and of society on those engaged in commercial pursuits. In the author's view the public high school has accomplished little more in training for specific jobs than the private business school.

In this connection the author has analyzed the Survey and Recommendations of the Federal Board for Vocational Education, and he deplores the failure of that Board to "redeem the situation."

In many ways the most serious criticism of the Federal Board's proposal is the failure to outline a virile program to redeem the situation which its own survey revealed. The tragic joke on secondary educators, and rather a monumental one, uncovered by the Board's Survey, is the fact that after a great many years of impregnating the high-school commercial course with certain technical subjects, 80 per cent of the commercial workers are found to be in occupations other than those provided for in high-school commercial courses. The so-called vocational studies in the high-school commercial course are thus disclosed to be *not vocational courses* and *not anything else*. They have been merely "motion making" [p. 575].

The technical subjects referred to are stenography, typewriting, and bookkeeping. That "80 per cent of the commercial workers are found to be in occupations other than those provided for in high-school commercial courses" is not evidence that secondary educators have attempted to train pupils for specific jobs and have failed. It is true that a large percentage of the pupils in high-school stenography classes have failed to acquire a working knowledge of the subject. But the demand for good stenographers has never been supplied, and there is every evidence of the fact that students of stenography who have succeeded in school have made profitable use of their technical training and have succeeded in business. All curricula are valuable in proportion to the intelligence, interest, and effort of the pupils. That teachers of general mathematics, physical science, and social studies, which the author would substitute for commercial subjects, would have stimulated greater interest and effort on the part of those who have failed in stenography, is extremely doubtful.

If a student *must* drop school before he is sixteen, seventeen or eighteen, it is time, when he decides to drop, to give him some definitely vocational courses [p. 571].

The practice of steering into the commercial course pupils of low-grade caliber would alone account for the fact, if it is a fact, that the high-school commercial course is "not vocational and not anything else." Parents, grammar-school teachers, high-school teachers, and all others concerned have been doing precisely this since commercial subjects were made a part of the high-school course. In most cases pupils drop school because they do not



like to study; their imagination does not carry them forward to goals set up by curriculum-makers. Their failure begins somewhere down in the grades, and it is completed in the first or second year of high school. The notion that the study of stenography or bookkeeping will give the drop-out type of pupil vocational intelligence is erroneous.

In schools where the subject of bookkeeping is a study only of bookkeeping devices, there is ground for the author's criticism. The remedy, however, is not to abandon the subject in the first two years of the commercial high-school course, but to change its content and method of presentation in such a way as to bring the elementary principles of accounting, "as a tool of administration and control," within the grasp of first- and second-year pupils. When this subject is so presented and when it is supported by adequate courses in applied mathematics, economics, and commercial law, it will yield its quota in educational values.

If it appears from the Federal Board's survey that high-school commercial courses are not meeting the needs of students, there is some evidence to the contrary. Eighty per cent of the graduates of the High School of Commerce in New York City and of the Commercial High School in Brooklyn continue their education in higher institutions. A recent investigation by Principal Raynor of the latter school shows that 43 per cent of the graduates of his school secure initial employment in positions requiring a knowledge of stenography and typewriting or bookkeeping or all of these subjects. Both of these schools, which are among the largest commercial high schools for boys in this country, offer instruction in technical commercial subjects throughout the course.

These comments, however, do not impair the validity of Professor Lyon's main contention. Vocational training, in so far as it is attempted by public secondary schools, should develop qualities which function in all vocations, including the business of right living. That *Education for Business* will aid materially in the achievement of this aim cannot be doubted.

A. G. BELDING

NEW YORK CITY

*The visual appeal in education for citizenship.*—Visual education is one of the promising movements of the day. Materials of instruction, however, have not been well adapted to classroom use. Motion-picture films of real educational value are few in number, and slides for use with a projector have not had wide adoption. With these conditions in mind, the editor of a new series of textbooks has adopted a new scheme, that of flanking the content of each page with a series of pictures arranged in motion-picture sequence. *We and Our Government*<sup>1</sup> is the first of a series on social science to be published by the American Viewpoint Society.

<sup>1</sup> JEREMIAH WHIPPLE JENKS and RUFUS DANIEL SMITH, *We and Our Government*. New York: Boni & Liveright, Inc., 1922. Pp. 224. \$1.50.

The purpose of the book, as stated in the foreword, follows:

The Government of the United States must be carried on by intelligent American citizens who have a grasp of the fundamental principles underlying its organization and activities. The purpose of this first volume . . . is to state and discuss those principles simply and concisely [p. 4].

The book contains fourteen chapters, each of which is introduced by the presentation of practical human-interest materials selected from the situations of everyday life. National, state, and local government, political parties, taxation, citizenship, naturalization, and city government are some of the topics discussed. The subject-matter deals mainly with political phases of government, but, according to advance announcement, social and political aspects of government will be introduced in later volumes of the series.

The illustrations mark the book as something novel and new. The photographs, facsimiles, and cartoons—over five hundred in number—are arranged in sequence and contain a connected narrative running parallel with that of the text. The picture narratives of the steps in the naturalization of the alien and of the citizen voting at the polls are especially well arranged. The facsimiles of important events and figures in American history weave in a historical background which increases the value of the book. There are fourteen full-page drawings by Hanson Booth. The graphs and charts offer valuable pedagogical aids in presenting important topics to the adult in the Americanization school as well as to the pupil in the grades. The drawing which traces a bill from its introduction until it becomes a law and the one which traces the relationships that exist between the citizen and the state government are examples of the psychology of graphic presentation applied to the schoolroom.

The typographical features of the book are commendable. Several different sizes of type are used to advantage. Important words and sentences are italicized. Some of the pictures are indistinct, which detracts from the utility of the volume. The book is bound in either limp leather or full board cloth. It should find a place in the home, the school, and the library. It follows advanced pedagogical thought and merits the attention of anyone interested in education for citizenship.

W. G. KIMMEL

---

*Mathematics for the junior high school.*—The main problem of the junior high school is the development of courses and methods which provide the type of work best adapted to the needs and abilities of pupils who, because of their maturity, are above the elementary type of instruction but are not yet ready for high-school work. It is generally agreed by those who are working on this problem that some of the work now offered in the senior high school should be brought down, that some of the material now taught in the seventh

and eighth grades should be retained, and that some of the typical work of these grades should be transferred to the senior high school.

A course of study published recently by the Board of Education of Cleveland, Ohio,<sup>1</sup> shows that progress is being made in the solution of the problem. Briefly, the content of this course is as follows: during the seventh grade commercial arithmetic is studied, with six weeks given to graphs and some simple equations; twenty-five weeks of the time of the eighth grade are allowed for the study of intuitive geometry, the remaining time being given to applied commercial arithmetic and to some optional work in geometry and trigonometry; the work of the ninth grade is algebra. Thus, the traditional work of the seventh, eighth, and ninth grades has been changed to include a considerable amount of intuitive geometry. To the pupil who does not continue his school course, this organization offers an opportunity to receive training in space intuition before he leaves school. At the end of the ninth grade he will have had a richer course, and at the same time he will be well prepared to continue the study of plane geometry in the tenth grade.

One of the principal aims of the junior high school has not received as much consideration in this course as it deserves. It is a well-known fact that American pupils lose from one to two years of time studying secondary-school mathematics as compared with pupils of the same age in the schools of Europe. Most of this waste occurs in the seventh and eighth grades. The junior high school offers an opportunity to eliminate this disparity by breaking away from tradition and by making a complete reorganization of the mathematical curriculum. Much of the commercial arithmetic in the Cleveland course lies outside of the experience of pupils of junior high school age. It can, therefore, be of little educational value; it is not retained by the pupils, and it is not the best material with which to secure proficiency in arithmetical computation. The intuitive geometry offered in the eighth grade comes within the pupil's experience and is concrete; its applications are most suitable for developing arithmetical skill. A better psychological arrangement would be to move this geometry down into the seventh grade and to transfer the commercial arithmetic to a later period. This would also eliminate the frequent interruptions caused by changing from one subject to the other. The arithmetical applications would make unnecessary much of the formal drill and the frequent reviews planned for the seventh grade. The time gained could then be used to bring in some of the simple but fundamental and exceedingly valuable notions of the upper courses.

It is to be hoped that the mathematics teachers in the Cleveland junior high schools will continue their work of reorganization until a course is formulated on the basis of real needs in the life and studies of the pupils for whom it is intended.

E. R. BRESLICH

<sup>1</sup> *Course of Study and Syllabus: Junior High School Mathematics.* Cleveland, Ohio: Board of Education, 1922. Pp. 45. \$0.50.

*The English of business.*—The title of Mr. Deffendall's book<sup>1</sup> is defended in the second paragraph of the Introduction, written by Harlan Eugene Read, by the statement that every illustrative sentence in the book is taken from business fields. This device emphasizes the unity of treatment and unquestionably restricts the author's field of interest to that phase of English which he professes to treat—the English of business.

The book's most valid claim for consideration, however, is stated by Mr. Read in the first paragraph of the Introduction:

The second really notable thing Mr. Deffendall has done is scientifically to select and arrange the common errors of speech with the corrected forms. These errors are no mere hodge-podge of incorrect phrases presented for haphazard study. With careful, painstaking scholarship, the author has compiled lists of the common vulgarisms, colloquialisms, and grammatical blunders of American speech. He has used Dr. Charters' *Study of Pupils' Errors*, and other similar studies, besides a list of his own, gathered from years of experience as an instructor in English [p. vi].

If the author has followed carefully the results of diagnostic studies, his book should represent a valuable addition to the textual matter of English. There can be no doubt that the basis of study in English expression—on its formal side, at least—must lie in the defects which are in need of correction. While the book is not the first text in English to present this point of view, it stands easily among the more recent progressive efforts to readjust the subject-matter of English composition and grammar in the light of practical needs.

It is not easy to understand, however, why the good English which Mr. Deffendall advocates for the business world is not good English for everyone. The same subject-matter with less insistent restriction on its application would insure the book a wider popularity.

ROY IVAN JOHNSON

*High-school chemistry.*—In the title of their book,<sup>2</sup> *Chemistry and Its Uses*, the authors have indicated the keynote of their treatment of the subject.

The teacher who is convinced that a textbook in elementary chemistry should give a presentation of a large number of the principles of the subject with application of these principles, together with a large amount of factual material, will find this book nearly ideal. On the other hand, those teachers who feel that the texts intended for pupils of senior high schools should be the repositories of a fund of technical information, which could well be left for more advanced courses or for specialized related courses, will perhaps find ground for criticism.

The materials of this text are organized in such a way that a proper balance between abstract theory and the practical application of chemistry to industry,

<sup>1</sup> P. H. DEFFENDALL, *Actual Business English*. New York: Macmillan Co., 1922. Pp. x+202.

<sup>2</sup> WILLIAM MCPHERSON and WILLIAM EDWARDS HENDERSON, *Chemistry and Its Uses*. Boston: Ginn & Co., 1922. Pp. viii+448.

the home, and life has been happily maintained. The result is an unusually readable book. By dividing the subject-matter into forty-seven short chapters, the author has succeeded in presenting the material in small, easily assimilated portions. The treatment of the element nitrogen is typical. In an early chapter are presented the simpler facts concerning the element, and in a much later chapter, after certain principles are given through other studies, the discussion of the compounds of nitrogen is taken up. One sees through the entire organization a very carefully worked out scheme of development.

The illustrations—mostly photographs—make a very strong appeal. The place of chemistry in the field of industry is vividly told by a series of very unusual pictures. Another noteworthy feature is the frequent use of well-prepared charts, such as "Some coal tar products," "Air products," "Langworthy Charts," etc. The historical side is carried out by the insertion of pictures of the scientists who had to do with the particular material under consideration, and a short biography shows the part each played in the present-day knowledge. Excellently written chapters or paragraphs are found on such subjects as food, vitamins, jellies, soils, dyes, explosives, colloids, health, sanitation, etc., pointing out the relation of chemistry to the ordinary affairs of life. A well-selected list of questions or exercises follows most of the chapters, and a separate book provides suggestions and directions for laboratory exercises.

The book has many excellent features and doubtless will be found to be, not only an unusually teachable text, but also a splendid reference book for the beginner in chemistry.

VERGIL C. LOHR

*Occupational guidance in France.*—Reports of practical accomplishments in occupational guidance are coming from a number of cities in France. Through the efforts of M. Julien Fontègne, one of the best informed and most progressive advocates of occupational guidance in France, Strasburg is undeniably entitled to recognition as one of the leading cities of Europe in this line. Fontègne is director of the Regional Vocational Guidance Service for Alsace and Lorraine and has had the advantage of developing his system under systematic German support and supervision. Bordeaux also is entitled to recognition for leadership through the efforts of M. F. Mauvezin, whose objectives, methods, and experimental results are presented in a recent publication.<sup>1</sup>

Mauvezin defines occupational guidance as the "free enlightened choice of a profession" (p. 9). His object in publishing is to aid those who are contemplating entering upon some vocation and to furnish a guide for those who desire to act as counselors. He believes that all of the facts on occupations should be before parents, educators, employers, and pupils before they approve or condemn individual choice.

<sup>1</sup> F. MAUVEZIN, *Rose des Métiers*. Éditions Littéraires et Politiques. Paris, France: 62 Rue Tiquetonne, 1922. Pp.392. 30 francs.

In the first chapter Mauvezin discusses the meaning of guidance; in chapters ii to v he takes a definite stand for comprehensive, cumulative records, obligatory pre-apprenticeship or manual work for all children between six and fourteen years of age, and for the intelligent contributing interest of parents. Chapter vi contains practical advice for children; chapter vii outlines briefly methods for organizing occupational guidance in France; chapter viii emphasizes the responsibility of the employer in matters of vocational guidance and apprenticeship contracts; chapter ix urges the necessity, not only of a general medical examination, but also of a thorough examination of the eyes, ears, nose, and throat, before a choice of profession is made; chapter x, "Rose des Métiers," contains analyses of characteristics and aptitudes for success in 250 vocations; and chapter xi offers a partial list of training opportunities.

The character and aptitude analyses were published and distributed by M. Mauvezin as blue-prints in the form of a "Rose des Vents" to which he gave the name "Rose des Métiers." The name has been carried over to the book although it is not inclusive of the material in the monographs which comprise the first chapters of the volume.

As a professional man and as director of the Chamber of Trades of Gironde and the South-West, M. Mauvezin has had exceptional opportunities to secure accurate information on the various occupations which he has listed. Collection of information has been a cumulative process covering a period of years. Extended practical experience in analysis of occupations coupled with a corresponding analysis of workers furnish the basic facts from which he has drawn his guides to occupational choice and adjustment. His manner of presentation is especially happy since the "Rose des Métiers," whether in the blue-print or the book form, can be used alike by child, parent, employer, educator, or counselor.

There is at the present time no similar publication in the United States. During the period of the world-war a number of investigations were instituted which paralleled in part those which have led to this composite French work, but none was brought to a successful conclusion. Obviously, there is need for continued investigation in our own country and for such co-ordination of fragmentary researches and practice as will result in an authoritative presentation of facts on the basis of which occupational guidance and employment adjustment may go forward. In the meantime, students of occupational guidance in all parts of the world will welcome this outstanding contribution to the literature of the subject.

Educators who are interested in French experimentation in guidance and placement will find news notes of considerable value in the *Bulletin de la Chambre de Métiers de la Gironde et du Sud-Ouest* (91 Rue Paulin, Bordeaux, France) and *L'Orientation Professionnelle* (10 Rue Scheffer, Paris XVI, France), published monthly.

ANNA Y. REED

*Easy Latin reading.*—Among British contributions to the teaching of elementary Latin is a new Latin reader<sup>1</sup> in the "Lingua Latina Series," containing eleven brief plays that have been used with success in the Perse School. It is similar to *Decem Fabulae* of the same series, and, as the author states in the Introduction, "is intended primarily for those who employ the direct method." Teachers who do not employ the direct method will find the book of value in providing practical material for rapid reading, for the plays can be read at a pace fast enough to maintain a lively interest and provide real enjoyment. The book is entirely commendable except for one feature, the early introduction of subjunctive forms.

LAWRENCE W. BRIDGE

*The Lincoln School.*—Educators who are interested in the organization and activities of experimental schools will welcome the publication of a booklet<sup>2</sup> giving an outline view of the Lincoln School of Teachers College. The pamphlet contains twenty-one sections devoted primarily to general information regarding the purpose, organization, curriculum, and activities of the school. Each subject of the curriculum is briefly discussed from the standpoint of the value of its content and methods in developing the abilities and serving the needs of the pupils of the school. The organization of the school as a society in which the pupils are regarded as responsible members is described, and certain miscellaneous matters and announcements are included.

W. C. REAVIS

*Unified mathematics.*—A great number of books have been written on mathematics for the tenth grade or the second year of the high school, but there are very few books which give children at this level an adequate conception of spatial relations. The real value which a child derives from the study of geometry depends largely on the progress he makes. The material selected should be such as proves its worth by actual service in life. The aim is therefore to give the student "not so much mathematics" as is generally given in the traditional course but "more about mathematics."

It is to meet these general aims that Mr. Reeve has prepared his book<sup>3</sup> on general mathematics. The course is so arranged as to make unnecessary the long and tedious reviews that are found in many books. This gives an opportunity to introduce new and interesting material without requiring additional time.

<sup>1</sup> R. B. APPLETON, *Ludi Persici*. London: Oxford University Press, 1921 [revised]. Pp. 68.

<sup>2</sup> *A Descriptive Booklet*. New York: Lincoln School of Teachers College, Columbia University, 1922. Pp. iv+80.

<sup>3</sup> WILLIAM DAVID REEVE, *General Mathematics, Book Two*. Boston: Ginn & Co., 1922. Pp. xii+446. \$1.60.



One of the chief features of the book is the manner in which the form of proof is presented. After the figure is drawn and the hypothesis and the conclusion are given, the page is divided into two parts by a vertical line. To the left of this line all statements are given and numbered, while to the right the corresponding authorities are given and numbered. If the pupil follows this method of proof, the task of reading and scoring papers will be minimized, although we might question the value of the numbering. With some pupils it might lead to pure memory work rather than thinking.

The author has broken away from tradition to some extent in that he has omitted material now considered useless or of little importance, e.g., the incommensurable cases and the theory of limits.

In the opening chapter, the pupil is initiated at once into the practical use of the instruments of geometry. In the second chapter, the student is introduced to the logical proof which is applied to the three fundamental theorems of plane geometry. The informal proof would have been sufficient here, since the logical tends to confuse the student. While the book as a whole is a treatise on geometry, algebra and trigonometry are introduced. The algebra consists of the solution of quadratic equations by the graph and the quadratic formula, and some attempt is made at correlation by applying the algebraic notation to geometric situations. The trigonometry is as simple as the algebra and geometry of the first two years, and some correlation is made between trigonometry and arithmetic. It is to be regretted that more correlation has not been made between the various branches of mathematics presented in this book when so many opportunities to do so occur from time to time. In conformity with the best of modern thought, the closing chapters of the book contain a most elementary discussion of analytics entirely within the mental grasp of the pupil.

Since educators are beginning to recognize the advantage of teaching mathematics as a unified subject, this book will no doubt be welcomed as a valuable addition to the list of texts in the field of correlated mathematics.

C. A. STONE

---

*Education for home-making.*—In 1918-19 the federal government appropriated about a million and a half dollars for vocational education. States could draw on this fund by matching dollar for dollar state funds against national funds. For 1922-23 the federal appropriations are \$4,623,000, which with duplicate state appropriations makes a total of over \$9,000,000. These figures show that the Federal Board for Vocational Education, together with the state organizations which it has built up, is undoubtedly the active factor in the increased interest in vocational education.

In order to bring to the public a clear conception of the meaning and purpose of the vocational education act as it related to home economics, the Board in 1919 issued Bulletin No. 28. Therein were set forth the purpose and provisions of the act, the manner of distributing funds, administrative machinery,

types of schools, and suggested courses of study. This bulletin has been the foundation of the vocational home economics work in all of the states.

As the work has developed, certain changes have taken place which made necessary the revision of the 1919 publication. The revised edition<sup>1</sup> brings up to date the administrative policies of the Federal Board as they relate to home economics education. One significant feature is to be noted: a closer correlation between the objectives of the course of study and the topics suggested for reaching those objectives.

The first step then in determining the content of a course of study which will fit the student for the occupation of home making is an analysis of the occupation of home making. . . . The efficient home maker must be a skilled worker in general housekeeping. . . . As a joint manager, the home maker is responsible for the character of her enterprise and the standard of living and for the product which the home will turn out. She is the purchasing agent, a partner in the business, and usually the business manager. . . . She is the educational manager, the health and welfare manager, and the social manager of the family group [pp. 15-16].

In the 1919 bulletin the outline of a suggested course of study for part-time classes contained twelve topics of which nine were based on acquisition of technique in food preparation and only two on choice of food, and but one related to managerial problems. In the revised bulletin only part of one topic is concerned with the technique of cooking; the others deal with food selection, maintaining physical fitness, selection and purchase of clothing, choice and care of house furnishings—not as comprehensive as the statement of objectives, but much more so than that of the original bulletin. It is true that these are only suggested courses, since each state makes its own outline; but it is the thing that is suggested which is almost sure to be taught.

Although the bulletin is intended to be of interest primarily to schools doing vocational work, it should be read by everyone engaged in home economics education.

LILLIAN STEVENSON

*Social thought.*—Man continually faces a world of social problems. The effective solution of these problems depends in a large measure on the degree of success in which he masters the intricacies of social thinking. The intelligent citizen of today is beginning to attack social problems and is therefore entitled to any aid that will furnish him with a social background for the understanding of current social processes and problems. It is this purpose of providing the serious-minded student with a fundamental background for understanding the central theme of human progress that makes the appearance of a recent book<sup>2</sup> of decided interest. In the Preface the author has promised a treatise

<sup>1</sup> *Home Economics Education*, Home Economics Series No. 2, Bulletin No. 28. Washington: Federal Board for Vocational Education, 1922 [revised]. Pp. vi+54.

<sup>2</sup> EMORY S. BOGARDUS, *A History of Social Thought*. Los Angeles, California: University of Southern California Press, 1922. Pp. 510.

for students, one "not intended to be the last word on the subject, but simply a first word." He has more than kept his promise. He has not only opened a new road to truth about social life but has written a book which can indeed be used with profit by the mature student. It provides the type of background that is desirable to enrich the study of sociology along pure and applied lines.

In the analysis of the social thought of mankind during the entire historical era the author has surveyed the most important material that has been published on the subject. He has presented the essence of this material in brief compass and in an interesting manner. The book bears the marks of wide study, clear vision, skill, and scholarly care. The author has, in fact, succeeded admirably in his effort to condense the essential characteristics of the social thought of different periods and writers.

The various headings of the twenty-eight chapters into which the text is divided indicate the wide scope of the book. The opening chapter presents a concise discussion of "The Nature of Social Thought." The author expresses social thought as follows: "Social thought, as distinguished from individual thought, treats of one's associates and of groups" (p. 13). Thus far a large proportion of thinking in human history is largely either "individual or social, rather than sociological" (p. 13). "The history of social thought rises out of the beginnings of human life on earth and with jagged edges extends along the full sweep of the changing historical horizon. It finds expression through some of the world's best minds. Our quest will bring us in contact with the most vital moments of the world's most valuable thinkers" (p. 18). "Earliest Social Thought," as expressed "in the form of proverbs, maxims, fables, and myths," is considered in the second chapter. This is followed by chapters on "Social Thought of Ancient Civilization," "Hebrew Social Thought," "Grecian Social Thought," and "Roman Social Thought," stressing in particular the teachings of the Stoics, and by an analysis of "Early Christian Thought." Brief summaries of "Medieval Social Thought" and "Utopian Social Thought" are followed by a discussion of "Individual Social Thought," in which the major concepts of a large number of writers, from Machiavelli and Hobbes to William G. Sumner, are rapidly brought before us. In the same manner "Malthus and Population Concepts," "Comte and Positive Social Thought," "Marx and Socialistic Social Thought," and "Buckle and Geographic Social Thought" are treated. The last thirteen chapters cover the modern period beginning with Herbert Spencer and coming down to Edward Ross. The breadth of the treatment may be judged from the topics which the author includes for discussion: "Spencer and Organic Social Thought," "The Sociology of Lester F. Ward," "Anthropologic Sociology," "Eugenic Sociology," "Conflict Theories in Sociology," "Co-operation Theories in Sociology," "Psycho-Sociologic Thought" (two chapters), "The Trend of Applied Sociology," "The Rise of Educational Sociology," "The Sociology of Modern Christianity," "Methods of Sociological Investigation," and "The Dissemination of Sociological Thought."

There is need for a book of this sort. The volume, in fact, fills a real gap and represents a significant contribution to the literature of sociology. It should find wide use and receive a cordial welcome.

F. L. SCHWASS

*Standing up for grammar.*—The controversy over the study of grammar is seldom dormant, and the fact that its place and part in the school curriculum are a real problem is generally admitted. In a recent book<sup>1</sup> 176 pages are devoted to the treatment of grammar, twenty-two pages to phonetics and oral English, twenty-seven pages to the use of the dictionary and vocabulary building, and six pages to composition. The section on grammar lays considerable emphasis on diagramming. In the introductory section, the author, discussing methods to be followed in using the book as a text, says:

The diagram has been abused by teachers who fail to make the pupil see that it is only a device to show the proper relationship of the words, phrases, and clauses in the sentence. It is, moreover, one of the best methods of making the subject of grammar really interesting, since it provides physical activity, which . . . is essential to the teaching of young students [p. xvii].

In the earlier pages of the book which treat the subject of oral expression, emphasis is placed on the advantages of possessing a pleasing voice, the value of clear enunciation, and the importance of other good speech habits.

As stated in the Preface, it is "the study of grammar which constitutes the *raison d'être* of the book." It will no doubt prove to be of considerable interest to those teachers who welcome a renewed emphasis on this phase of English study as a foundation for "better speech."

ROY IVAN JOHNSON

## CURRENT PUBLICATIONS RECEIVED

### GENERAL EDUCATIONAL METHOD, HISTORY, THEORY, AND PRACTICE

- COOPER, LANE. *Two Views of Education*. New Haven, Connecticut: Yale University Press, 1922. Pp. x+322. \$2.50.
- A *Descriptive Booklet*. New York: Lincoln School of Teachers College, 1922. Pp. iv+80.
- HANNA, AGNES K. *Home Economics in the Elementary and Secondary Schools*. Boston: Whitcomb & Barrows, 1922. Pp. vi+328. \$2.50.
- JUDD, CHARLES HUBBARD, and BUSWELL, GUY THOMAS. *Silent Reading: A Study of the Various Types*. Supplementary Educational Monographs, No. 23. Chicago: Department of Education, University of Chicago, 1922. Pp. xiv+160. \$1.50.

<sup>1</sup> ANNIE E. POLK, *Better Speech*. New York: Century Co., 1922. Pp. xxvi+252.

- MARVIN, CLOYD HECK. *Commercial Education in Secondary Schools*. New York: Henry Holt & Co., 1922. Pp. viii+216.
- Outlines of Child Study*. Edited by BENJAMIN C. GRUENBERG. New York: Macmillan Co., 1922. Pp. xx+260.
- A School in Action*. New York: E. P. Dutton & Co., 1922. Pp. xiv+344. \$2.50.
- UPDEGRAFF, HARLAN. *Rural School Survey of New York State: Financial Support*. Ithaca, New York: Joint Committee on Rural Schools, 1922. Pp. 234. \$0.75.

## BOOKS PRIMARILY FOR HIGH-SCHOOL TEACHERS AND PUPILS

- BLACHLY, FREDERICK F., and OATMAN, MIRIAM E. *Everyday Citizenship*. New York: Charles E. Merrill Co., 1922. Pp. viii+252.
- Course of Study Monographs of the Los Angeles City High Schools*: No. 1, English; No. 2, Social Studies; No. 3, Mathematics; No. 5, Commercial Studies; No. 6, Modern Languages; No. 7, Latin; No. 8, Home Occupations; No. 9, Physical Education (Boys); No. 10, Physical Education (Girls); No. 11, Music; No. 12, Physical Science. Los Angeles, California: Department of Educational Research, Los Angeles City Schools, 1922.
- NESBIT, WILBUR D. *First Principles of Advertising*. New York: Gregg Publishing Co., 1922. Pp. vi+112. \$1.00.
- Virgil's Aeneid, Books I to III*. Edited by C. E. FREEMAN. New York: Oxford University Press, American Branch, 1922. Pp. 158. \$1.20.

PUBLICATIONS OF THE UNITED STATES BUREAU OF EDUCATION  
AND OTHER MATERIAL IN PAMPHLET FORM

Recent issues of the Bureau of Education:

- Bulletin No. 37, 1921—*Malnutrition and School Feeding*.
- Bulletin No. 18, 1922—*The Residence of Students in Universities and Colleges*.
- Bulletin No. 20, 1922—*State Laws Relating to Education*.

## MISCELLANEOUS PUBLICATIONS

- American Ballads and Songs*. Collected and edited by LOUISE POUND. New York: Charles Scribner's Sons, 1922. Pp. xxxvi+266.
- LA PORTE, WILLIAM RALPH. *A Handbook of Games and Programs for Church, School, and Home*. New York: Abingdon Press, 1922. Pp. 126. \$1.00.

